

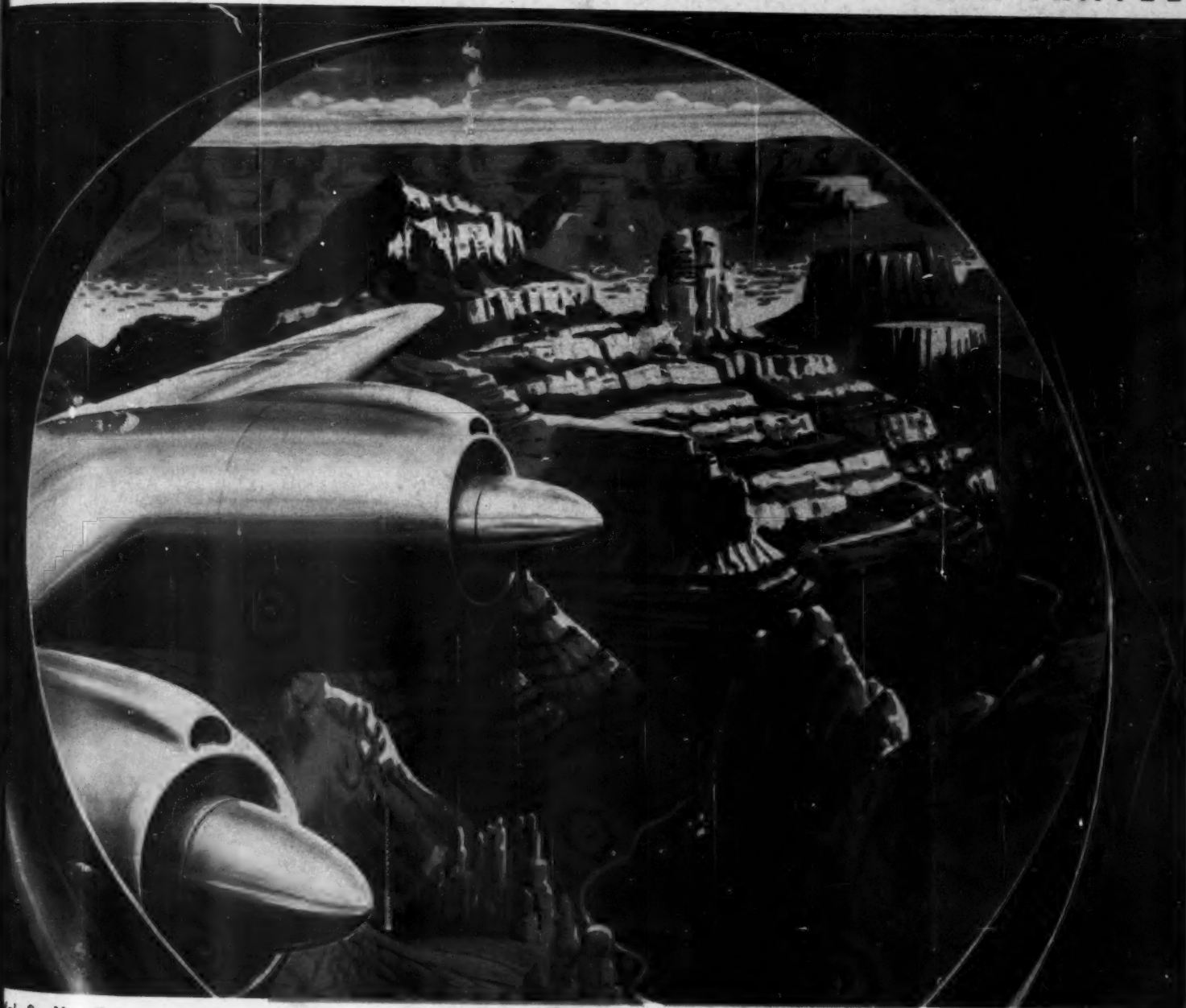
WORLD-WIDE

AIR TRANSPORTATION

1935 U. S. PAT. OFF. DES. MAR.

REV RR

AIR CARGO ★ ★ ★ AIR COMMERCE ★ ★ ★ AIR TRAVEL



Vol. 9 No. 5

NOVEMBER 1946

In This Issue

- We Need Specialized Airports • Distances and Air Freight • Barrel-Belly Transport
Why Orphan the Domestic Freight Forwarder? • Air Commuters in Business Suits
Where Does the Insured Air Passenger Stand? • That Cargoliner 230

Panagra

now...faster, stepped-up schedules with **DC-4^S** serving:



- Panama
- Colombia
- Ecuador
- Peru
- Bolivia
- Brazil
- Chile
- Argentina

sell Panagra all the way...Balboa to B.A...

SERVING THE AMERICAS SINCE 1928

Panagra

PAN AMERICAN-GRACE AIRWAYS • CHRYSLER BUILDING, NEW YORK, N. Y.

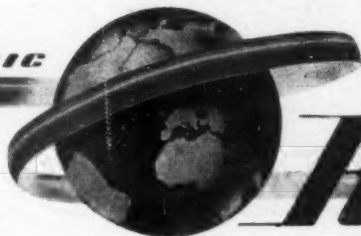
For air express information,
contact Railway Express Agency.
For passenger information, consult
your own travel agent or the
nearest District Sales Office of
Pan American World Airways.



HIGH ABOVE ALL IN GLOBAL TRANSPORTATION

THE XF-12 IS A LONG-RANGE, HIGH SPEED PHOTO RECONNAISSANCE AIRPLANE DESIGNED AND BUILT BY REPUBLIC FOR THE ARMY AIR FORCES. ((IT IS THE FORERUNNER OF TOMORROW'S RAINBOW... A REVOLUTIONARY COMMERCIAL TRANSPORT ALREADY ON ORDER IN FLEET UNITS BY AMERICAN AIRLINES AND PAN AMERICAN WORLD AIRWAYS. ((WHEN THESE GREAT LUXURY LINERS TAKE TO THE AIR... IN THE NOT TOO DISTANT FUTURE... THEY WILL BRING TO GLOBAL TRANSPORTATION NEW CONCEPTS OF SPEED AND LUXURY, LINKING THE CAPITALS OF THE EARTH HOURS... AND DAYS... FASTER THAN THE BEST SCHEDULES NOW IN OPERATION... AT CRUISING SPEED OF OVER 400 MILES PER HOUR.

REPUBLIC



Rainbow

A PRODUCT OF **REPUBLIC AVIATION**

Masters of the Mighty Thunderbolt

REPUBLIC AVIATION CORPORATION, FARMINGDALE, L. I. N. Y.

NOVEMBER 1946—PAGE 3

ENGLAND'S & PERROTT'S

(Proprietors: Carter Paterson & Co.)

INCORPORATING R. C. ENGLAND, PERROTT & PERROTT, HARMAN & WILKES

HEAD OFFICE

79/81 GOSWELL ROAD, LONDON, E. C. 1

BRANCH OFFICES: *Liverpool, Southampton, Glasgow, and other cities*

AIR TRANSPORTATION	WE specialize in handling air transportation of passengers, express and freight.
★	
CARTAGE	WE collect, deliver baggage, merchandise to and from all Docks and Airports in the British Islands.
★	
EXPORT	WE quote and ship all descriptions of merchandise to any part of the world.
★	
IMPORTS	WE clear through Customs at Docks and Airports, all classes of merchandise, pay duty where required, and deliver as instructed.
★	
PACKING	WE receive household goods, personal effects, samples and merchandise in large or small quantities, and pack for export. We also receive, deliver and pack automobiles.
★	
STORAGE	WE have storage accommodation, where baggage or merchandise may be warehoused for long or short periods.
★	
TRAVEL	WE secure transportation tickets for all means of travel and obtain the best available accommodations.
★	
PASSENGER'S BAGGAGE	OUTWARD: We collect from Passenger's address and forward to any steamer or airline. INWARD: Our representatives meet all steamers and airlines arriving in the Ports of London, Liverpool, Southampton and Glasgow to render passengers any assistance and to receive instructions as to disposal of their baggage, etc.
★	
UNITED STATES CORRESPONDENTS	BLUEFRIES - NEW YORK, Inc. INTERNATIONAL SHIPPING AGENTS 44 Whitehall Street New York 4, N. Y., U. S. A.

HANGAR Chatter

At the National Aircraft Show in Cleveland we decided to take advantage of a Navy-sponsored flight in a PBM-5A. On the way out to the runway we had to pass a guard whose duty it was to distribute passes to flight passengers which would entitle them to return to the show without being required to pay an admission fee for a second time. Certainly a good idea. We read our pass right after climbing into the big flying boat, and it was then that we sensed the flutter of butterflies in our stomach. "Pass Out," said the pasteboard in most inconsiderate bold type.

* * *

Hector Van Peeps, special mail clerk for this column, comes through with several letters which he has induced us to quote in part. Writes T.L.S., of Federal Air Freight Company:

"We are very pleased with your magazine. It is literally crammed with factual information which we find to be of great interest to us. In fact, I am utilizing some of the figures published in your magazine as reference material in our current CAB application."

And B.B.P., of Slick Airways:

"Since 1944 when the Ferrying Division of the Air Transport Command first seriously started to militarize the domestic operation of handling priority traffic by air and relieving the commercial airlines of this responsibility, we in the operations of Military Air Transport (MAT) read with enthusiasm each issue of AIR TRANSPORTATION. And today, we in the non-scheduled contract air freight business religiously read AIR TRANSPORTATION."

And finally B.B.H., of Willis Air Service:

"We feel that your magazine deserves a special vote of merit from all the contract carriers for your articles, past and present, and we think that your publication, more than any other single air magazine, has hit the nail on the head in bringing this coming industry before the public."

* * *

Tampico Airlines, which is hard pressed for space, has requested that a retired ferryboat be permitted to moor at LaGuardia Airport's Marine Terminal. According to Hugh I. Wells, president of the airline, the vessel would be used to house company executive offices, passenger lounge, shops, etc. Our elfin Zeno McInnify suspiciously smells a sea-air plot, but we think it's a sad commentary on the housing situation.

* * *

Almost superhuman vigilance by our canny proofreader, Aesop Phippsworthy, caused him to pluck out from among a veritable jungle of verbiage the name, SLICK, from which a typesetting reverist had dropped an L. We think a vote of thanks is due our Mr. Phippsworthy who handily saved the distinguished oil and airline name from giving an L of a sickly appearance in our magazine.

Vol. 9
No. 5

AIR TRANSPORTATION

[REG. U. S. PAT. OFF.]

50 CENTS A COPY • \$5.00 A YEAR

Nov.
1946

FEATURE ARTICLES

- We Need Specialized Airports** 7
By GENE KROFF
- Where Does the Insured Air Passenger Stand?** 12
By JOHN G. KELLY
- Distances and Air Freight** 22
By JERRY MARTIN
- Why Orphan the Domestic Freight Forwarder?** 28
By JOHN F. BUDD

GENERAL ARTICLES

- Barrel-Belly Transport** 20
Introducing the Northrop Pioneer
- Air Commuters in Business Suits** 32
Operations of Long Island Airlines
- That Cargoliner 230** 38
United Aid Lines takes air freight seriously
- Aaxico on the Go** 40
Background of American Air Export-Import Company
- On the Non-Scheduled Front** 43
News and notes on the non-scheduled airlines

NEWS

- EAL in Air Freight Field 18
- Flown Equipment Battles Locust Plague 18
- LaGuardia to Give Way to Floyd Bennett 29
- No-Show Service Charge in Effect 29
- Air France Gets New Cargo Chief 44
- Chennault Signs Contract with China 44
- Fast Inc. Pays Brokerage 44
- George Heads Peruvian Airline 44
- WAL Opens New Offices 44
- 2 Airports to be Scene of Tests 44
- Willis Sparks Air Cargo Terminal 45
- 1st Month of 5c Air Mail 45
- NWA Representatives Pave Way 46
- Improved Service Seen 47
- Leslie Sees 4c Air Mile 48

DEPARTMENTS

- It's an Air World** 30
By L. A. Goldsmith
- Air Cargo Personalities** 36
- Short Take-Offs** 39
- Airdom** 42
By Richard Malkin
- Legal Notes** 46
By George Boocher
- Air Transportation Books** 48
- Air Commerce** 49
- Air Transportation Congratulates** 50
- Non-Scheduled and Intrastate Airlines** 52
- Headlines Under the Deadline** 63

THE COVER—The breathtaking beauty of Grand Canyon as seen through the window of a TWA transport.

JOHN F. BUDD, Editor and Publisher

Copyright 1946, Import Publications, Inc.
Publishers of CUSTOM HOUSE GUIDE and
AMERICAN IMPORT & EXPORT BULLETIN

Publication Office:
TEN BRIDGE ST., NEW YORK 4, N. Y.
Phone: WHitehall 4-2898

Business Manager: B. L. WEST
Managing Editor: RICHARD MALKIN
Advertising & Public Relations Director:
HENRY W. FISCHER

Mid-West Representation:
WYATT MACGAFFEY and
F. R. JONES
228 North LaSalle St., Chicago, Ill.
Phone: STate 5996

Pacific Coast Representation:
ROBERT H. DEIBLER & ASSOCIATES
2506 W. Eighth St., Los Angeles 5, Calif.
Phone: TUCKer 1579

All Rights Reserved. Printed in U. S. A.
No part may be reprinted in any form
without written permission.



Beechcraft *Bonanza*

Better Timing for Business Travel

- 4 comfortable seats
- Sound-proofed, heated and ventilated cabin; muffled engine
- 175 mph cruising speed; 750 mile range at 165 mph
- Fully equipped; nothing else to buy
- Operating cost: as low as 1¢ per passenger mile

The new Beechcraft Bonanza gives you the same go-when-you-want-to-go mobility as the automobile does. You do not have to accommodate yourself to the timing, habits and convenience of scores of other people. You travel when it suits you best.

The Bonanza speeds you at nearly 3 miles a minute between destinations where no other acceptable transportation is available. It clips hours—and often days—from the non-productive travel time of executives and personnel. And it saves you money. With the plane in regular daily use, the actual direct operating cost can reach as low as 1¢ per passenger mile.

The fatigue-saving, morale-building aspect of Bonanza transportation equals its common-sense business efficiency. Just as it makes the most of business hours, it can make the most of an executive's leisure time for needed rest and recreation. Any way you want to figure the investment... the Bonanza pays!



***There's nothing more to buy
...Just step in and fly!***

Beechcraft distributors are prepared with facts and figures to help you evaluate the contribution which the new Bonanza can make to your business or profession. Production for 1946 and early 1947 is already sold. Orders for delivery will be filled in the sequence received. Write for full information or see your Beechcraft distributor—and the new Bonanza—now! Beech Aircraft Corporation, Wichita, Kansas, U. S. A.

We Need SPECIALIZED AIRPORTS

By GENE KROPP . . . Head of Aviation Operations Engineering School, Parks Air College

A plan to develop separate airfields for passenger planes, cargo planes, and personal aircraft

HOW will the states spend the 30 millions in Federal funds they have just received for airport development?

In the old-fashioned way of constructing one field to serve all types of aircraft from Piper Cubs to Flying Boxcars and DC-6s? Or will there be at least one city with enough imagination, vision and planning to build a minimum of three airports, one for each of three kinds of operators: the passenger airlines, the private planes, and the cargo-planes.

Eventually, every large city in the United States will have to have specialized airports—airports adapted to the needs of private flying, air freight, and air passengers. The problem is convincing municipalities that they must keep progress on the ground abreast of progress in the air.

Most airports are overcrowded and inadequate. They were built during the Depression Thirties when it was impossible to forecast the tremendous expansion that the Forties would bring.

Not only was the size of airports underestimated, but facilities were neglected. New York City spent millions in laying out and building LaGuardia Field only to discover that it was too small even before it was opened to traffic. If that is true, what about those 1930-model white elephants? Many cities are finding it impossible to expand present fields because of the difficulty of acquiring property, or because proper zoning regulations were not set up to protect approaches to the field.

Other deficiencies:

1. During bad weather airlines are limited to single runway operation because of inadequate instrument approach procedures.

2. Using only one airport for all types of traffic complicates the airport traffic control problem. (The writer was recently a passenger on an airliner that was forced to "pull up and go

around" when two light planes, without radio facilities, taxied onto the runway on which a transport was about to land.

3. Ramps are so congested that passengers must walk several blocks from the plane parking area to the terminal building.

4. The airline passenger has practically no protection from the weather as he walks to or from an airliner.

Ramp Conditions

5. Congested ramp conditions are further complicated by the increasing number of air conditioning, gasoline, mail, express, cargo, and baggage trucks used, to say nothing of the smaller units such as battery carts, fire extinguishers, loading stairs, and commissary equipment.

6. Hangars now must house private planes, those of non-scheduled operators, and airliners, and are crowded to the bursting point.

7. Automobile parking facilities are inadequate, particularly for those air-

line passengers who desire to drive their own cars to the field and leave them (with protection, of course) until they return from an air trip.

8. Landscaping of the grounds is badly neglected under present crowded conditions.

9. Passenger waiting rooms are much too small. Some large cities provide fewer seats than there are in a DC-3.

10. Rest rooms are untidy and small.

11. Restaurant facilities are inadequate at most terminals, particularly where the management caters to the general public.

12. Ticket offices are so crowded that efficient and speedy handling of passengers is impossible.

13. There are inadequate facilities for handling the large amounts of air cargo now being received, shipments that are constantly increasing in number and size.

14. Improper facilities for adequately meeting the needs of the private flier are actually retarding the development of this group.

These are the most important deficiencies and they cannot be corrected with any "patch upon patch" methods of enlargements of present fields. The only logical and workable answer is the creation of specialized fields and the segregation of flight equipment.

No railroad would think of running freight cars and passenger cars into the same terminal. No operator should think it feasible for cargo and passenger planes to use the same airport.

In the plan for specialized airports there would be three different kinds of fields: a large airport for passenger planes, a large field for cargo planes, and one or more small airparks for personal planes. Under the present planless accumulation of facilities, every plane from 65 horsepower up to the four-engined giants takes off and lands on the same runways. No one would think of letting a scooter or a bicycle



Gene Kropf

hold up the arrival or departure of the *Super Chief*, but in the field of aviation a parallel situation often develops.

In the present system an overcrowded airport is made to serve all three purposes with the result that none of them is adequately cared for. Each type of aircraft requires a different type of service, different facilities and equipment that could more easily be provided at such specialized fields.

One has only to visit one of the larger all-purpose fields to understand why efficient operation is impossible. The problem of providing sufficient ramp space, maintenance buildings, ticket offices, already mentioned, is becoming more complicated, with the advent of many new operators flying all types of equipment. Before the war, many of our airports were already too small, and today one of the major lines operating into one of the so-called "better fields" must share hangar space with another operator and is allowed only two ramp positions, to say nothing of congested office space.

Separate Entities

Under the proposed separation plan, each problem could be studied as a separate entity, providing the fields and facilities that appear necessary. One of the prime factors for consideration is airport capacity. A foresighted attempt to forecast the coming expansion at each field would provide the dimensions required.

It has been estimated that the number of air carrier craft will increase 14 times by 1950, while the number of personal planes will increase 18 times in the same period. With these forecasts we can begin the study of three factors affecting capacity of the airport. These are runway, taxi, and ramp capacity, figures that will vary for each type of field mentioned. But let us examine the passenger airline field first.

The following plan can be used for cities with a population of more than 150,000:

Runway capacity is determined by spacing between landings and take-offs. Under average conditions, 70 aircraft per hour can use one runway, allowing 50 seconds per aircraft. Under the same conditions the taxi capacity must also be 70 aircraft per hour for each runway, for full utilization. Also there must be enough ramps to handle these aircraft after they leave the taxiway. Figuring 20 minutes for ramp time, loading facilities should be provided to service simultaneously one-third of the landing capacity.

A single runway airport with a capacity of 70 movements per hour could accommodate 35 landing aircraft per hour if all planes were on through



FIELDS FOR PERSONAL PLANES—Writing of personal plane owners, Kropf states that we "owe this large group of taxpayers something in the way of adequate facilities and service." Above is 17-year old Patti Lear, daughter of William P. Lear, president of Lear, Inc., who, like many thousands of others, flies her own plane.

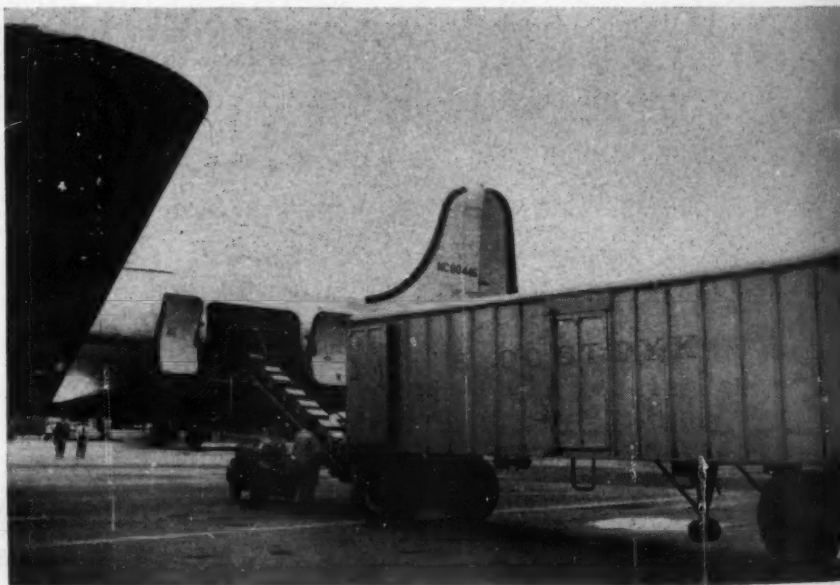
flights. Under this condition, facilities to load 12 aircraft at one time would be necessary. However, since we have not considered originating and terminating flights, it would be safer to provide about 20 loading spaces for each runway that could be used at one time.

With these forecast figures, we can plot the exact capacity of that field. Since it will be used only for passen-

ger operations, more expert planning is possible and future expansion already is taken care of. For 350 movements per hour, five runways must be used and 75 loading positions must be provided at the ramp. Since cargo planes and those of the private flyer would never be using this field, the passenger field could be laid out to serve adequately the needs of passenger airline operators.

Present airport terminal buildings are a hodgepodge of cut-up offices, rooms, and passageways that are necessary as long as all types of operation must be conducted from the same building. A terminal, constructed to serve only passengers, could contain the finest facilities by omitting air mail field offices, cargo-loading and sorting rooms, and maintenance shops. Such a terminal would not have to be much larger than present structures.

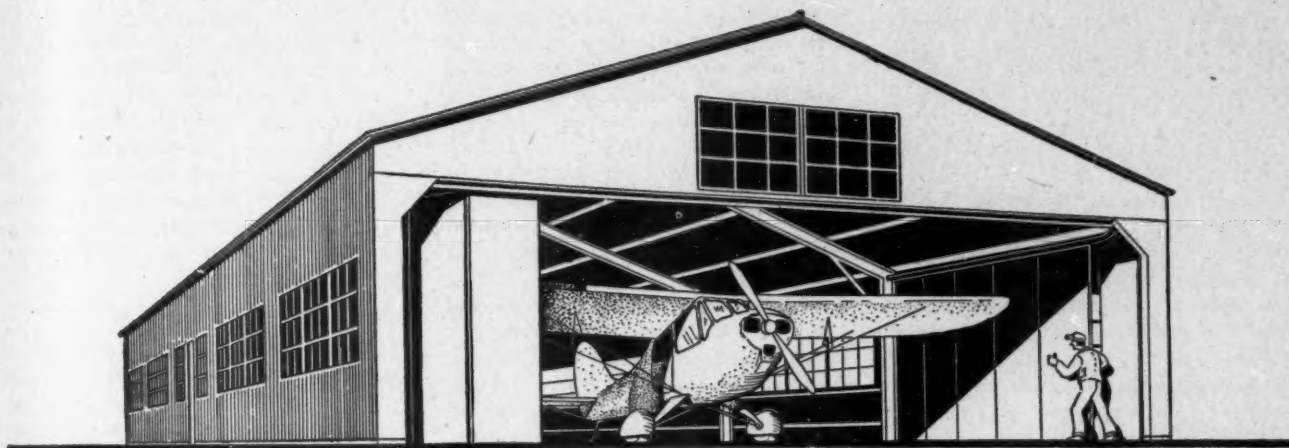
The terminal should provide adequate ticket office space, so that passengers on each airline could be processed in a more uniform manner; observation decks, so that visitors could view operations without mixing with airline passengers; separate waiting and rest rooms for the general public and the airline passenger; restaurants, to serve adequately the needs of the field. Landscaping of the grounds would be possible if air mail trucks, express trucks and other cargo conveyers no longer used the field. Passenger protection during inclement weather, through the use of covered canopies, should be built into such a terminal. In this way, all of the extra service that the airline operators talk about as being possible on board the present airliners might be



FIELDS FOR CARGOPLANES—Stressing the theme of specialization of airports is this picture of an American Airlines airfreighter taking on a load of milk containers at Philadelphia. Five-and-a-half hours after loading was completed, the plane landed in Omaha. Passengers and cargo don't mix, the author points out.

UTILITY HANGARS

by LURIA



FOR THE SMALL PLANE

Luria offers a new all purpose hangar for small planes. This building is designed as a permanent structure and is fabricated from heavy structural steel shapes.

Doors are precision built, pressed steel panels hinged together and hung on overhead track with self adjusting spring hangers. They are easily operated, rolling back inside building and providing a

clear opening of 38'0"x10'6".

By allowing for adjustments of length in 20' increments as well as a choice in door and window arrangement, Luria attains a flexibility that makes this building adaptable for combination use. Shop space, storage, offices, classrooms or other facilities can be arranged to suit specific requirements.

WRITE FOR COMPLETE SPECIFICATIONS AND PRICES

LURIA ENGINEERING CORPORATION

500 Fifth Avenue, New York 18, N. Y.

First National Bank Bldg., Chicago 3, Ill.

NOVEMBER 1946—PAGE 9

matched on the ground as well.

All operators should have enough hangar space to carry on a limited amount of line maintenance. This would be true because we have to provide only one type of maintenance service, compared to three types now offered on an unsatisfactory basis. With the standardization of flight equipment that probably will prevail again within a few years, the proposed plan of having one agency responsible for the loading and unloading of all aircraft at a station, could be put into effect very easily. Sufficient personnel provided with adequate equipment, constructed for use on passenger planes only, certainly would speed up operations. This would do away with the bottleneck of having employees of all companies on the ramp at the same time with a mass of trucks, carts, and cargo conveyers that clutter up the ramp and slow down ground time.

A specialized airport should be as near the center of the city as possible. Airline passengers are disgusted with the present ground transportation service. The small bus type equipment, at best, is usually crowded. With only one type of operation being conducted from the passenger field, the location problem might not be too complicated. Such operations would be conducted with the utmost efficiency and the latest types of airway and airport aids to navigation and safety. Only experienced carriers would be using this field. This would minimize the objection of most people to downtown airports, particularly those who feel that such fields are a real threat to safety and property

The Author

Gene Kropf is the head of the Aviation Operations Engineering School, Parks Air College. He also is general traffic manager of Parks Air Transport, proposed 9,277-mile feeder-local service airline for 15 Central and Southwestern States. Kropf recently made an intensive study of the airport problem in preparing briefs and exhibits for CAB hearings on route applications of Parks Air Transport. He is the author of more than 20 articles on aviation which have appeared in numerous magazines.

valuation. The safety record of our airlines is excellent even though they are operating under severe handicaps with today's all-purpose fields.

This special passenger field could not meet the needs of a cargo operator any more than a railroad passenger station could serve the needs of the freight hauler. This, however, brings up an important point: the location of the air cargo field. It might be well to place the air cargo field near other freight terminals. Certainly, such fields in the future must be near freight sidings so that less time is lost in transferring commodities from planes to trains and vice versa. Contrary to what some railroad people would like to have us think, the cargo plane will probably never replace its chief competitor, the freight train. There are many items that continually will be carried by ground means; however, the tie-in with rush merchandise and perishables is a natural.

The same can be said for the trucking industry. It uses separate terminals for passenger and freight runs and

the latter service will surely work in cooperation with any air cargo service. Therefore, the well located air cargo terminal must be capable of doing business with its fellow freight terminals.

The size of the air cargo field may again be planned for by using the capacity figures mentioned in connection with the passenger terminal.

The number of runways, taxi strips, and loading positions again will depend on the estimated number of aircraft to be accommodated. Our problem here will be more difficult since we do not have the many years of experience to use as a guide. However, if we use optimistic figures we probably would be able to figure maximum usage pretty close.

An air cargo field must also be equipped with navigation aids to assure continuous operation, but we all know that the limits set for non-passenger operation are a lot lower than those specified for the present air-carriers. This means that for basic operations, the air cargo field would not have to be as costly a venture as the passenger field.

Air Freight Terminal

So far as the terminal structure is concerned, we already have seen that present buildings certainly will not work out. The ideal air cargo terminal must be one capable of handling only air freight and capable of handling it with speed and efficiency. It will copy the lines of buildings now used by surface operators. It must contain large storage areas accessible from two sides, permitting simultaneous loading from trucks, trains and planes. Overhead monorail equipment and conveyers should be provided, with all manual labor to be done by mechanical devices. Docks constructed adjacent to such a structure would allow the aircraft to be moved into position at the receiving end of such loading devices.

Not only would this speed up the operations, but it would also reduce the cost by making other carts and personnel unnecessary. By making such a terminal accessible to box cars and trucks on one side and very accessible to aircraft on the other and by providing mechanical loading and unloading means, we would have provided almost all of the facilities necessary for air cargo operation.

If in the future all mail were to move by air (as it should), it is entirely possible that our present domestic operators would not be able to handle the increased loads. This factor, however, only tends to lend weight to such specialization. Certainly, the special planes used to carry only air mail and air parcel post loads would



FIELDS FOR PASSENGERS—Says Kropf: "The special passenger field could not meet the needs of a cargo operator any more than a railroad passenger station could serve the needs of a freight hauler." In the passenger vein is the above picture taken at Miami just before the inaugural nonstop flight of an Eastern Air Lines DC-4 from Miami to San Juan, Puerto Rico. This delegation of more than 50 Government, civic, and business leaders, headed by Captain Eddie Rickenbacker (holding hat near microphone), were flown in the plane.

also land at the air cargo field. This would mean construction of terminal facilities to handle post office requirements. Direct helicopter service could even be provided to the downtown area by have a landing space on the roof of the terminal. This would speed inbound and outbound mail on its way without mail trucks congesting the terminal.

All the niceties of the passenger terminal may be by-passed in this operation, but how about the private flyer and his needs? If our forecast figures are correct, we certainly owe this large group of taxpayers something in the way of adequate facilities and service. This is not possible today, and as a matter of fact, on many of the larger fields, he is even forbidden to land. This is not because we wish to discriminate against him, but only the fact that under present crowded conditions we cannot adequately serve all types of operators.

Let us examine their problem then and see what is necessary for the proper development of this group. In the first place, we will never sell the private airplane in the numbers mentioned until we are able to prove utility. This has been and continues to be the biggest problem for the lightplane dealer. Regardless of who is at fault here, one of the easiest ways to prove utility is to provide sufficient landing areas close

to destinations. How could this be accomplished better than by having specialized fields for only this type of operation. This type of operation requires less space and hence makes the location problem simpler. Many smaller fields located through a city or community certainly would give the private plane utility and on those fields we could provide the maximum amount of facilities necessary. These facilities, of course, differ from those previously mentioned for the passenger and air cargo fields.

The private flyer needs small T-type hangars for storage and the very limited amount of maintenance work he will do. He needs gas and oil facilities which probably will be provided by the operator of the field. This operator will also provide his other needs, such as weather information and major maintenance work. The private field will be much the smaller of the three special airports, but it will be able to give the desired service and at the same time free the other fields from such activity as pleasure flying, flight instruction, and commuting.

Thus we can see a real need for specialization of airports. And in a country such as ours, where specialization has reached its peak of development, it is only natural that the aviation field should also feel its effects.

Just as we have railroads and truck-

ing concerns specializing in certain phases of transportation, so too, we find the aviation industry branching out in a similar way. This newer industry was also to find that special equipment was necessary, and now it is evident that our present system of airports is not capable of handling all the different sections. Certainly, if special flight equipment is necessary, then special ground equipment is also a must. This point is readily admitted, but along with safety and efficiency, such operators are also faced with a cost problem, and under present conditions, operating costs are much too high to allow full development.

The proposed plan of specialization of airports, while it is an expensive plan, certainly would make possible the full development of all three groups. Such a plan is not practical for all cities today, but certainly at the larger terminal points it is very necessary, and would go a long way in solving many of the problems facing operators and private pilots alike.

Fairchild Resigns

Sherman M. Fairchild has resigned as chairman of the board and a director of the Fairchild Engine and Airplane Corporation. An outstanding aviation figure, he is chairman of the board of the Fairchild Camera and Instrument Corporation, president of Fairchild Aerial Surveys, and a board member of Pan American Airways and International Business Machines.



Royal Dutch Airlines

WHAT?

Anything up to 7000 lbs. Special low rates for perishables.

WHERE?

Anywhere in the Caribbean, South and Central America, Europe, the Middle and Far East.

HOW?

KLM's Royal Route

For full information call Royal Dutch Airlines, Freight Office, 145 Front Street, New York 5, N. Y. WH 4-9210.

Where Does the INSURED

By JOHN G. KELLY, Assistant General Counsel, The M

THE most frequent type of aviation insurance question presented to the courts has been determination of the effect of those four familiar types of aviation exclusion which in the past were generally included in accidental death benefit provisions and which may generally be described as the (1) "participation in aeronautics" or "in aviation operations" exclusion; (2) the "participation in aeronautics" or "in aviation operations as a passenger or otherwise" exclusion; (3) the "engaging in aeronautics" or "in aviation operations" exclusion; and (4) the "engaging in aeronautics" or "in aviation operations as a passenger or otherwise" exclusion.

Of a total of 83 cases dealing with aviation questions under life and accident policies, 39, or approximately half, deal with the interpretation of these four types of exclusion clauses. In discussing these cases it will be necessary that some generalizations be made regarding the language, rather than to attempt to indicate the precise variations in wording of individual policies. For the present purpose I have taken the liberty of making the four general groupings that have been suggested, despite some variance in individual language, because even without that further refinement we can clearly appreciate the trend of the law on the interpretation of these clauses. Where a particular variation in wording has been given special emphasis by the court, this will be indicated.

An exception under which the insurance company did not assume liability for death which was the result of participation in aeronautics or in aviation operations has been held more often than not to grant coverage to an insured whose death resulted from riding as a passenger. In cases decided up to 1933 the courts regarded flying as a passenger as participation in aeronautics or in aviation operations. In 10 cases decided since 1933 the courts have reached the opposite conclusion in nine instances and followed the earlier decisions in only one case.

The addition to the foregoing exception of the words "as a passenger or

Legal aspects of a subject demanding the increasing attention of those flying in scheduled and non-scheduled planes

otherwise" or "except as a fare-paying passenger" enabled four courts to give to the exclusion the effect originally intended.

However, in a recent New York case decided in February of this year, the court held that even with the additional clarification "as a passenger or otherwise" the exclusion of death resulting from participation in aviation or aeronautics did not bar recovery where the insured was flying as a fare-paying passenger.

The exception "engaged in aeronautics" or "in aviation operations" has been uniformly held by the courts to be inapplicable to a death resulting from flying as a passenger and recovery by the beneficiary has been permitted.

Recent Cases

In five cases decided in the years 1934 to 1940, it was held that the death of a passenger was not covered where the exception contained the additional words "as a passenger or otherwise." However, in two recent cases the courts have taken the contrary view and have held that the words "engaged in aviation or aeronautics as a passenger or otherwise" have an occupational connotation and do not refer to an ordinary fare-paying passenger on a flight when not occupationally engaged in aviation or aeronautics. The first of these latter two cases was decided by the New York Court of Appeals in March, 1943, and was followed by the Supreme Court of Tennessee in June, 1944.

The rather extreme conclusion which the New York Court of Appeals reached in the case just mentioned, i.e., that a person riding as a passenger was not engaged in aviation as a passenger, stands in sharp contrast to an earlier decision of the same court in 1931. In the earlier case the exception read "engaging as a passenger or otherwise in aeronautics expeditions." The court held that an insured who was riding as

a passenger on a commercial plane was engaged as a passenger in an aeronautic expedition. It interpreted the word "expedition" in the light of the state of aviation in 1924 when the policy was written. It pointed out that at that time a flight was an extraordinary event and thought to be accompanied by unusual hazards. It concluded that the word "expedition" must have been used in reference to an ordinary passenger flight; and rejected the contention that the word might have had reference to engaging in an aeronautic expedition for the purpose of discovery or exploration, such as a polar expedition, saying: "Who has ever heard of passengers accompanying such an enterprise?"

The difference in approach taken by the New York court in these two cases in the space of 12 years is a significant indication of a trend which is apparent in so many decisions interpreting aviation limitations in policies—the tendency to interpret the limitation in the light of the current state of aviation and current terminology.

In its 1943 decision the New York court frankly expressed this point of view stating in reference to the 1931 decision, holding "that case is of little help to us in determining the present question. There is nothing in the opinion in that case that forecloses consideration of current changes in the common understanding of the ordinary everyday meaning of words and phrases which changing conditions of life over a lapse of time have effected." The court then commented on the safety record of aviation in 1930 and in 1935.

The general rule of law is that words in a contract must be determined in the light of the meaning they had when the contract was made. The departure from this rule which has been so common in cases involving interpretation of aviation limitations is even more strongly illustrated by the decision in *Gregory v. Mutual Life* decided in 1935. That case involved a policy issued in 1925. The

ED AIR PASSENGER Stand?

counsel, The Mutual Life Insurance Company of New York

double indemnity provision excepted liability for death resulting from participation in aeronautics. Death occurred while the insured was riding as a passenger in a private plane.

In holding that the death did not result from participation in aeronautics the court frankly recognized that when such phraseology was first introduced into insurance contracts aviation was in such an experimental stage that there was no place about the instrumentality of aviation for anyone who was not participating in the venture. It stated, however, that in the subsequent 10 or 15 years aviation had progressed from a dangerous experiment to a well-recognized standard means of passenger transportation. It concluded that the terms of the policy must be considered in the light of these known revolutionary changes and developments in the art.

The fact that in this field of law there have been departures from the general rule of construction of contracts—that they must be interpreted in the light of their meaning when written—is perhaps but another manifest reflection of the rapidity with which American aviation has developed during the last 20 years.

This tendency of the courts to interpret aviation exclusions in the light of the present day situation rather than in the light of the situation which existed as of the time the policy was issued is emphasized in the very recent decision of the United States Court of Appeals of the District of Columbia involving the death of the well-known war correspondent, Raymond L. Clapper.

Mr. Clapper, at the time of his death, was a passenger in a United States naval plane flying in the vicinity of the Marshall Islands. His death resulted from a mid-air collision with another aircraft. The accidental death benefit provision in the policy excepted the company from liability for death resulting from "an aeronautic flight." The court conceded Mr. Clapper's death resulted from a flight, but held that it was not the result of an "aeronautic" flight, defining aeronautics as the science that treats of the operation of aircraft and

stating that a mere passenger has no part in the art of the aeronaut.

This very brief review of the manner in which the courts have interpreted aviation exclusion clauses points to the obvious lesson of the desirability of the simplest terminology possible. For the less well understood "engaging" or "participating" must be substituted a simple phrase such as "operating or riding in." However, even the use of simpler terms may not entirely obviate the danger of a later interpretation which does violence to the original intent.

Army Flight

In a recent case the policy contained an aviation exclusion clause under which the company did not assume the risk of death resulting from operating or riding in any kind of aircraft except as a fare-paying passenger in a licensed passenger aircraft operated by a licensed pilot on a regular passenger route between definitely established airports. The insured's death occurred as the result of a flight in an Army plane regularly operated in Puerto Rico for the transportation of military personnel and civilians having an Army priority. The insured was a member of the United States Army. The court had no difficulty in determining that the flight satisfied most of the requirements of the aviation clause, but hesitated somewhat on the point of whether insured could be regarded as a fare-paying passenger. It finally concluded that he could be so regarded, stating that a person who had his fare paid by his employer would be deemed a fare-paying passenger; that members of the military forces being transported by private carriers with their fares paid by the Government would be regarded as fare-paying passengers; and that accordingly if the Army "goes a step further, as it did here" and transports personnel at its own expense, they should be regarded as fare-paying passengers "in the broadest use of the term."

The words "fare-paying passenger" have been interpreted in a more realistic manner in two other cases. In one of



John G. Kelly

these cases it was held that an insured who was riding under a trip pass, for which he paid \$8, was not a fare-paying passenger. The court emphasized the difference between the regular fare (\$94.03) and the amount paid by the insured, and also the fact that the conditions under which he was being carried differed materially from those applicable to a fare-paying passenger.

In a second case it was held that an insured riding in a plane piloted by a man who held only a private pilot's license and paying no fare for the transportation could not be regarded as a fare-paying passenger. In two cases involving military personnel it was held that a radio operator and a pilot of an Army bomber were not fare-paying passengers. In these latter two cases the court rejected the contention that the aviation clause was inapplicable because insured's presence on the plane was due to Army orders, and the death therefore a result of forces over which he had no control.

There are 14 cases dealing with aviation deaths which occurred during the war. Several of these cases have already been referred to.

In the first case the insured was an Army aircraft pilot. While operating

his bomber over Germany he was killed by anti-aircraft fire. His death occurred while the plane was still in flight. The policy provided that death as a result directly or indirectly from operating or riding in any kind of aircraft other than as a fare-paying passenger in a licensed passenger aircraft provided by an incorporated passenger carrier and operated by a licensed pilot on a regular passenger route between definitely established airports, was a risk not assumed and that in the event of such death liability would be limited to the reserve on the policy.

Court's Decision

The court held that the reduced amount was payable, and stated that the policy by its terms clearly provided coverage only for the hazards of commercial airplane passenger transportation. It emphasized the increased hazards of military aviation in time of war and said that the premium for coverage as a fare-paying passenger on a commercial line necessarily differed considerably from the premium which would have been payable to a company assuming all the risks and dangers, directly or indirectly, confronting an insured engaged in military aviation in time of war. The court concluded:

"Where an aviation clause excludes generally 'death as a result directly or indirectly from operating or riding in any kind of aircraft, whether as a passenger or otherwise' and then introduces one qualification, namely, that it is not to be applicable in the single situation where the insured is a fare-paying passenger on a commercial passenger airliner, we cannot read into the clause 'another qualification to the effect that it shall be inapplicable where the insured is flying a plane under orders in military or naval service. Such a reading would go beyond the scope of permissible interpretation."

In a recent New York case the policy contained the same aviation clause as in the preceding case. The insured was killed in the crash of a naval plane. The policy also provided that it was free of conditions as to residence, travel, occupation and military or naval service, except as to double indemnity. Between this provision and the incontestable clause, which was the next succeeding printed provision of the policy, there was a rubber stamp endorsement reading:

"Except as provided by aviation rider attached hereto."

The beneficiary conceded that the death did not come within the exception in the aviation rider, i.e., riding as a fare-paying passenger in a licensed aircraft, etc. She contended, however, that

GYROPILOT GUIDE



Artist's sketch of a United Air Lines DC-4 making an airport approach entirely by electronic control. The secret is the Sperry A-12 gyropilot, which recently went through successful tests at MacArthur Airport, Long Island, New York. Without any of the two veteran UAL pilots touching the controls, the big four-motored ship glided down to within 20 to 50 feet of the end of the runway before the pilots resumed manual control. According to Preston B. Bassett, president of Sperry, the company is continuing research into refinements and developments to bring automatic controls for bad weather flying to an even higher level. According to William A. Patterson, United's president, all of the airline's new and old planes will be equipped with gyropilots.

the aviation limitation was ineffective because:

(a) It conflicted with the policy provision that it was free of conditions as to military or naval service.

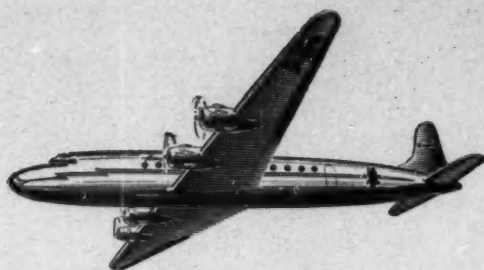
(b) This same provision indicated the intention of the contracting parties to be that the aviation rider related only to civil aviation.

(c) The rubber stamp endorsement "except as provided by aviation rider attached hereto" might be regarded as modifying the occupation clause or the incontestable clause.

The court rejected all these contentions. It emphasized that in the light of the questions regarding aviation, and particularly military aviation, in the application and the attached military and

naval blank, it was not likely that the insured when he received his policies believed or assumed that the insurance company had not excluded from its risk aviation in the naval or military service. The court stated it would be neither reasonable nor intelligible to read the words "except as provided by aviation rider attached hereto" as modifying the succeeding incontestability provision rather than the preceding provision under which the policy was free of conditions as to military or naval service.

The third war aviation decision which is of special interest involved the death of a member of the Civil Air Patrol whose landplane was forced down on the Atlantic Ocean about 30 miles from the coast. The insured was dead when



**"Finger-Tip Control" of
Inventories Is Maintained**

by

CRAWFORD
CLOTHES

using

AMERICAN AIRLINES *Airfreight*



This clothing chain—one of America's largest—manufactures its clothing in Long Island City, N.Y. and has 68 stores—64 in the New York-Connecticut-New Jersey-Pennsylvania area and four in Detroit. To keep close, finger-tip control of Detroit inventories, Crawford ships an average of 1,000 pounds of merchandise every day from New York to Detroit by American Airlines Airfreight. Mainly because of regulated "feeding" via Airfreight, no store is caught in short supply or burdened with slow-moving items. A minimum of merchandise is tied

up in transit. Styles are released simultaneously in New York and Detroit. Airfreight is a "natural" for Crawford's economical, factory-to-consumer way of doing business.

Hundreds of shippers of many, diversified products are employing with profit the speed, economy and adaptability of dependable American Airlines Airfreight. To find out how Airfreight can work for *you*—as an aid to established methods or as the basis for new merchandising, call your nearest American Airlines office or write us at 100 E. 42nd Street, New York 17, N. Y.

picked up two hours later by a naval boat, and the cause of death was given by the Navy doctor as drowning. The policy excluded liability for death resulting from participation as a passenger or otherwise in aviation or aeronautics except as a fare-paying passenger in a licensed aircraft operated on a regular schedule. The court took the position that the participation in aviation had terminated without injury to the insured, and that the fact that the airplane flight brought him to the point at which he was drowned was too remote to permit holding that the death was the result of aviation.

In reaching this conclusion, the court placed much emphasis on the decision in the *Bull* case in which there was evidence that a new cause, unrelated to aviation (Japanese gunfire) had caused the death. The court failed to discuss the *Green* case in which the facts were identical and it likewise failed to discuss the *Neel* case which also involved a drowning at sea following the forced landing of a plane. In the latter two cases the court held that a drowning at sea following the forced landing of a plane is an almost inevitable consequence, is certainly a familiar risk associated with such flying and, therefore, must be regarded as the result of the flight.

There is one other case involving a forced landing at sea in which the facts were slightly different. An Army major was riding as a passenger in an Army plane flying the Puerto Rico-Trinidad route which was entirely over ocean with the exception of one or two small islands. Neither the plane nor its occupants were ever heard of after taking off on this flight. The policy provided for payment of the reserve in the event that death resulted from operating or riding in any kind of aircraft. The court held that the reasonable and probable conclusion was that the plane fell into the sea and that the insured's death therefore resulted from riding in an airplane.

I would like to consider briefly the question of what is scheduled flying. The accidental death benefit provision of many current policies provides for coverage for passenger flying on a scheduled flight of a commercial airline. I have found one case in which the by-laws of a fraternal association provided that it should not be liable for death received in or caused by aerial conveyance except while the insured was a passenger on a licensed airplane operated by a licensed pilot carrying paid passengers on a regular schedule. The insured, a member of the Commission of Conciliation of the United States department of Labor, had been instructed by his superior officers to fly



TWO BITS GO IN THERE AND INSURANCE POLICY COMES OUT HERE—That's just the way it's done at the Airlines Terminal with a brand new vending machine, now operated on an experimental basis by Associated Aviation Underwriters, an association of aviation departments of 56 insurance companies. Buying an airline insurance policy these days is as easy as dropping a penny into a slot for a slice of juicy fruit or spear-mint. That smiling young lady above merely drops her quarter into the handy slot on the left side of the machine which starts all sorts of cogs and wheels to go into motion. The date and time are stamped—the policy is good for a full week—and the young lady can fill in the necessary information on the handy contract in the insurograph window: name, beneficiary, latter's address, flight departure, destination point. A button is punched and out jumps the original of the policy, while duplicates are retained in the machine. Face value of each policy is \$5,000, and for each additional 25-cent piece \$5,000 additional insurance can be purchased. Limit is \$25,000. The insured is covered "for loss of life, limb or sight, by accidental bodily injury while in transit as a passenger on specified scheduled airlines and on other specified conveyances or while waiting at any airport in transit." The machine was invented by Ralph W. Brown and Ernest H. Woods, former partners in a flour brokerage and bakery business located in Birmingham, Alabama.

to Miami in an Army combat plane in order to proceed from there to Puerto Rico to act as mediator in a strike. The plane ran into difficulty and the insured met his death after parachuting from it. While the contrary contention does not seem to have been seriously urged by the beneficiary, it is significant to note that the court did state:

"The plane to be used was an Army airplane and was known as an attack or combat plane. It was not a plane for which a certificate had been issued to carry paid passengers and was not operated on a regular schedule between two or more airports. Army planes are operated wholly independent of civil aeronautic regulations."

The court concluded that there could be no question but that the Army plane in which the insured was traveling did not come within the exceptions in the policy.

There is another war aviation case which—although not a final determination—lays down a rule of evidence of great importance. The court held that under the statutory shop book rule providing that a record made in the regular course of business is competent evidence, certified copies of official records of the War Department were competent evidence of the cause of death.

The word "scheduled" is more precisely defined in a case which dealt with

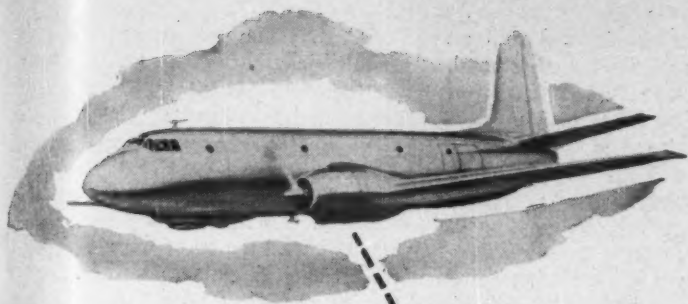
the statutory liability of a railroad to provide waiting rooms for the convenience of the traveling public and to keep such rooms open for a period preceding the arrival of passenger trains allowed by schedule or flagging to stop at all stations. In holding that the statute was not violated by the failure of the railroad to provide such accommodations preceding the stopping of a particular train under a special arrangement between the parties, the court said:

"The term 'schedule' implies something written, and when used with reference to a train implies that its operation is governed by a rule, rather than a particular direction or agreement."

The meaning the court gave to the word "schedule" is consistent with the dictionary definition:

"A written plan of future procedure in the carrying out of some project, indicating the time when each operation is to be begun and completed; as, a schedule for the construction of a building; esp., an outline of regularly recurring events; as, a train schedule."

The term "scheduled flying" is not defined by the Civil Aeronautics Act. However, a regulation of the Civil Aeronautics Board adopted in 1938 does define the term indirectly. This regulation states:

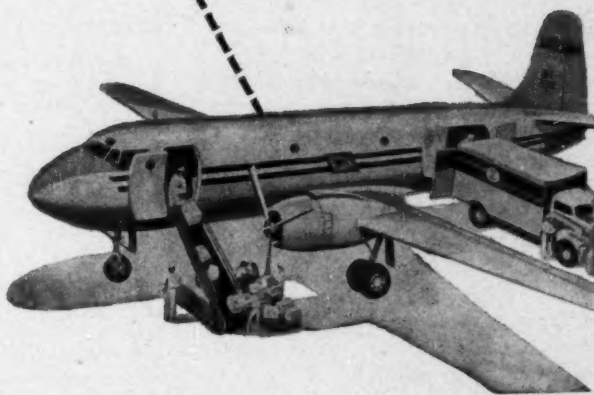


HIGH PERFORMANCE LOW COSTS...

MAKE MARTIN CARGO PLANES A "MUST"

LOW COSTS? Consider these facts about the Martin 2-0-2 and 3-0-3. No other manufacturer has sold so many postwar commercial planes. No other manufacturer gives you greater value for your equipment dollar! Big sales and quantity production mean low costs for you!

HIGH PERFORMANCE? You know that isolated figures on speed and range mean little. And space does not permit printing complete specs. So we suggest that you contact us and let us supply you with a complete set of specs for your engineers to analyze. Let the slipstick tell the story! See for yourself how the Martin 2-0-2 and 3-0-3 set new standards of efficiency. Prove to your own satisfaction that Martin passenger and cargo planes can boost volume and cut costs for your line! THE GLENN L. MARTIN CO., BALTIMORE 3, MD.



Martin
AIRCRAFT

Builders of Dependable Aircraft Since 1909

Travel or Ship by Martin Transport on these Great Airlines

Capital (PCA) • Eastern • Chicago & Southern • Braniff International
United • Northwest • Delta • Panagra • Willis (Cargo) • Cruzeiro do Sul (Brazil)

"Within the meaning of this regulation any operation shall be deemed to be non-scheduled if the air carrier does not hold out to the public by advertisement or otherwise that it will operate one or more airplanes between any designated points regularly, or with a reasonable degree of regularity, upon which airplane or airplanes it will accept for transportation, for compensation or hire such members of the public as may apply therefor or such express or other property as the public may offer."

A recent opinion of the CAB defines a scheduled air carrier as follows:

"The scheduled air carrier operates pursuant to a scheme or plan under which, within the physical limitations of equipment and facilities, a definite quantum of service is constantly available to the traveling public, and is held out as such through course of conduct in maintaining reasonably regular service, filing of schedules and tariffs, advertisements, etc."

Proposed Change

The CAB has also issued recently a proposed modification of its 1938 regulation under which it defined non-scheduled air operations. The proposed re-definition reads as follows:

"Within the meaning of this section, any operation shall be deemed to be non-scheduled if the air carrier does not hold out to the public expressly or by a course of conduct that it operates one or more aircraft between any designated points regularly or with a reasonable degree of regularity upon which aircraft it accepts for transportation, for compensation or hire, such members of the public as apply therefor or such express or other property as the public offers: Provided, however, that an operation between two points shall not be deemed to be non-scheduled if the air carrier in fact operates more than 10 round trips per month between such points for a period of two consecutive months, except in cases where the air carrier can demonstrate that such flights between such points for such period were conducted as a result of unusual, emergency, or non-recurring conditions, and that such flights did not result in the establishment of an operation conducted regularly or with a reasonable degree of regularity. Within the meaning of this section a 'point' shall mean any airport or place where aircraft may be landed or taken-off, or an area within a 15-mile radius of such airport or place where aircraft may be landed or taken-off."

The regulations and opinions of the Civil Aeronautics Board to which I have referred should probably be held not binding in the interpretation of a

contract between an insured and an insurance company. On the other hand, it seems to me that if the attention of the court were directed to such opinions and regulations, it would be greatly influenced by the definition that has been given to non-scheduled and scheduled operations. Therefore, there is great likelihood that the term "scheduled flying" may be given a broader meaning than that originally intended by the insurance companies.

As an offset to this possibility, it should be noted that on May 3, 1946, the CAB established a new regulation which prescribes standards for the issuance of non-scheduled air carrier operating certificates and safety regulations governing the operation of non-scheduled air carriers.

It is not possible to say exactly what the future may hold in store, but it does seem reasonable to assume that the ultimate result of the changed attitude of the CAB will be a safety record for non-scheduled carrier flying comparable to that already achieved in scheduled flying and once more I am sure the insurance industry will take prompt heed of that fact.

On the whole, the developments of the past 20 years may well be a source of great pride to aviation and to insurance. The most outstanding feature is, of course, the safety record of scheduled air carriers. The impact of this has been felt not only in underwriting practices, but also in the very manner in which courts have dealt with the language of aviation exclusion clauses. Finally, it is reflected in the voluntary action of insurance companies in liberalizing the terms of earlier more rigid exclusion clauses.

Five Points

The Institute of Life Insurance recently reported the following to Capital Airlines-PCA:

1. Life insurance companies with at least 68 billion dollars of insurance in force are selling policies at regular rates to people intending to make "unlimited" travel over United States airlines.
2. The number of companies selling such policies has increased by 385 percent from 1940 to 1945.
3. Additional companies, with at least another 72 billion dollars of policies in effect, issue policies at regular rates to those expecting to make a "normal" amount of airline travel—usually 50,000 miles a year.
4. Thus, life insurance companies with a total of at least 140 billion dollars of insurance in force are selling policies at regular rates to those intending to make extensive travel over domestic airlines.
5. Of all companies surveyed (104 companies), those doing 99.9 percent of the total volume of business will take an application from airline travelers for insurance at standard rates.

The fact that this safety record has enabled insurance companies to liberalize their underwriting practices on new issues and to extend the benefits provided by existing policies, is first and foremost a boon to the insuring public. Secondly, it is a tribute to the aviation industry. Finally, it is a great satisfaction to insurance itself whenever progress in any direction permits elimination of restrictive provisions, and thus enables the insuring public to receive broader benefits than were previously obtainable.

Neither aviation nor insurance has yet reached the point of maximum performance. But I am certain that in the future, as in the past, the relationship of aviation and insurance will be a continuing one with resulting benefit to those who are served by both — the public.

Eastern Air Lines Now In Air Freight Field

Eastern Air Lines was scheduled to inaugurate air freight service between all points of the company's system of routes, on November 1.

Tariffs apply from airport to airport, and, according to Captain Eddie Rickenbacker, as soon as suitable ground transportation can be arranged in the various localities pick-up and delivery service also will be made available. Rickenbacker stated that more than four years of research and study have gone into the development of the company's air freight service plan. For the present, air freight service will be handled over the EAL's regularly-scheduled flights. As the demand warrants and as new equipment is made available to the airline, all-cargo planes will be put into service.

Both DC-3s and DC-4s will be used in transporting air freight. Fifteen of the DC-4s are already in service, with five more scheduled to be delivered to the company soon.

Flown Equipment Battles Brazilian Locust Plague

Airfreighters of Aerovias Brasil, S. A., Brazilian affiliate of TACA Airways, recently flew three planeloads of farm insect fighting equipment—15,887 pounds of it—from Miami to Rio de Janeiro.

Consigned to the Brazilian Ministry of Agriculture at Rio, the equipment will be distributed to farmers in the São Paulo region, who until now have been using primitive means to stave off crop disaster in the country's rich coffee and wheat region. Winging their way in from the Argentine, Bolivia, and Paraguay, locust hordes have already wiped out 60,000 tons of wheat—more than half of Brazil's vitally needed grain crop.

The government appropriated \$10,000 to combat the hordes and rushed orders for fire-spraying guns and other equipment in the United States. This equipment was sped from West New York, New Jersey, and Huntington Park, California, to Miami, where it was loaded aboard DC-3s for the two-day trip south. More than a week was saved in transportation.



SHIPPERS! **every United plane** **carries** **AIR FREIGHT**

**100 United Mainliners and Cargoliners to
ease your shipping problems**

When you specify "United Air Freight" for your shipment, you are assured prompt, fast delivery, because United provides a wide frequency of daily cargo flights between 65 key business cities of the nation.

Air freight is carried on every United Mainliner and Cargoliner—100 planes in all.

All the advantages of a regular, scheduled service are yours—speed, 'round-the-clock service, schedules keyed to shippers' needs—plus the flexibility and dependability of air transportation.

Rates, scaled to decrease as your shipments grow in volume, are at the lowest point in scheduled air cargo history. And today, almost every kind of commodity can go by air. Try this fast, modern way to ship. Specify United Air Freight.

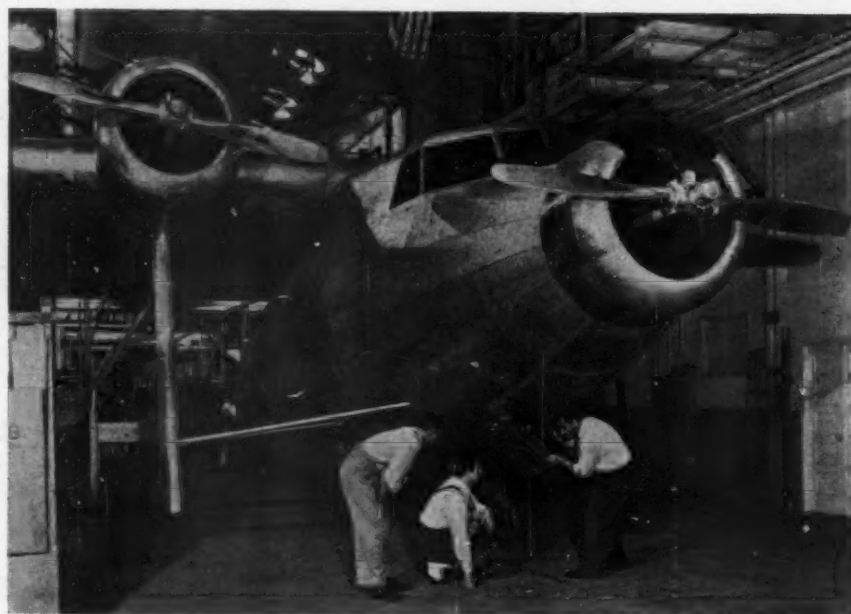
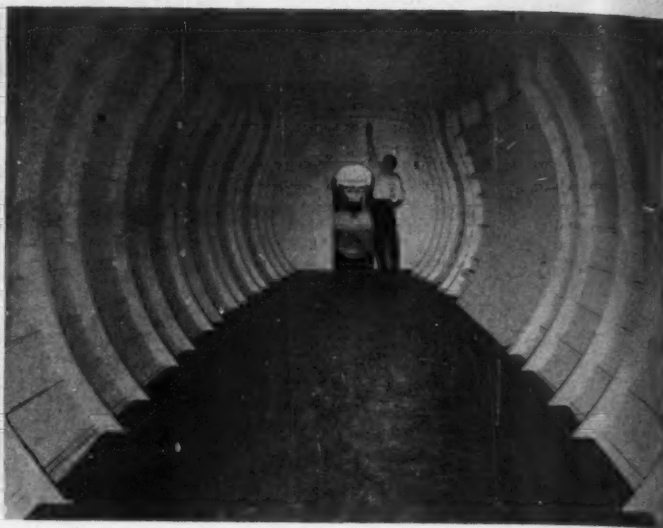
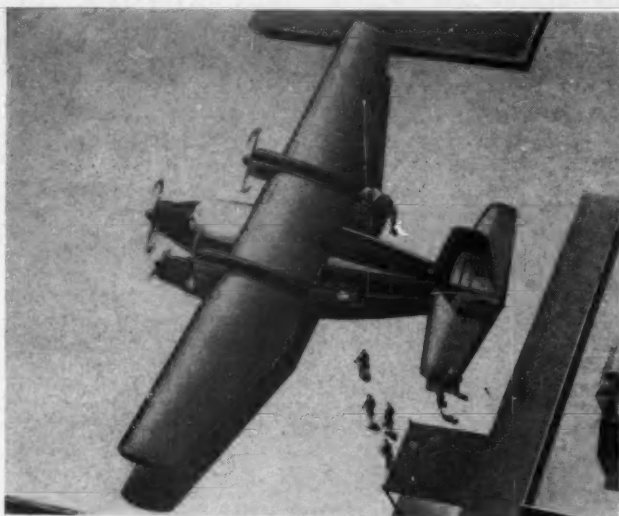
Pickup and delivery available in most major cities.

UNITED AIR LINES **AIR FREIGHT SERVICE**

(Also International Air Freight Carried)
5959 S. Cicero Ave., Chicago, Ill.

AIR MAIL NOW 5c. Postage rates on air mail have been reduced to 5c an ounce. Now, send all your letters by air—they're *first* to arrive... *first* to be opened... *first* to be answered.

BARREL-BELLY TRANSPORT



NORTHROP PIONEER—Artist's conception (above, left) of the Northrop Pioneer, three-engine cargo-passenger transport.

PLENTY OF ROOM—Interior view (above, right) of the Pioneer fuselage. Note the large cargo door on the right.

GIVING THE PIONEER THE ONCE OVER—Employees examine the belly hatch of the new Northrop transport. This is a wooden mockup of the Pioneer.

A FRANK bid for the potential business in countries like China and those in South America, Northrop Aircraft has come out with a three-engine cargo-passenger transport whose full-size mock-up recently was the object of considerable craning and inspection by international spectators at a special showing in Hawthorne, California.

The *Pioneer*, as it is called, is a barrel-bellied, 25,000-pound craft, designed not only for operation in remote areas of the world, but for domestic feeder lines as well. According to its builders, the *Pioneer* will operate efficiently from small, undeveloped fields, taking off with more than 10,000 pounds useful load in 700 feet and landing with the same load in 750 feet—which would

make any airport in the United States accessible to this plane.

Interesting in view of its short field performance is the fact that the *Pioneer* is not a small ship. It is designed for a 12½-ton gross weight, and is expected by the company to fly 8,500 pounds for 300 miles at a record low ton-mile cost. The *Pioneer* has a maximum range of 1,750 miles. Wingspan is 85 feet, with the fuselage 60 feet, seven inches long.

Says Northrop: "The cabin is large enough to solve the problem which often plagues airline operators—how to carry enough light-weight material to make a profitable enterprise out of carrying bulky commodities, such as coffee, for example."

It was pointed out that the *Pioneer's* three engines are an added safety meas-

ure for use over hazardous country. The failure of an engine over rugged terrain will be less crippling than to a twin-engine transport of comparable size, since only one-third instead of one-half the power is lost.

Decision to have the *Pioneer's* landing gear fixed was the result of a survey of short-haul operations carried out by Northrop technicians in Central America. When strength and economy in maintenance is considered, say the company experts, fixed landing gear will do better than retractable gear.

When used as a passenger plane, the *Pioneer* can carry up to 30 passengers plus a quantity of cargo. Removable seats can be replaced by tie-down rings for cargo stowage, this operation requiring only a few minutes. Two doors—a large one for cargo loading, and a smaller one for passengers—are on opposite sides of the plane, positioned to avoid conflict in loading.

AIR--X--PRESS

INFINITE VARIETY

TYPICAL of the volume and variety of Air Express that's flying U. S. air routes in these feverish days of supplying consumer scarcities was the traffic handled during October at one average office—Peoria, Illinois. During the month, Peoria's Air Expressmen handled everything from live animals to holiday costume jewelry, with weight of shipments varying from a few ounces to over 600 pounds per piece. Arriving and departing via the skyway were such things as flowers (from West Coast) feature films, insurance papers and radio transcriptions. In addition, there were the regular riders—machines and machine parts, as well as gift shipments, clothing, and meat and dairy products. Peoria, too, is proud of its status as an international airport office, equipped to issue waybills for international air express to South America and Europe and to many other foreign points.

THE FLYING LOBSTERS!

The LIVE LOBSTER season was off to an auspicious start in Spokane, Washington, last month, reports our Spokane operative, who, incidentally, has become something of a seafood connoisseur himself because of wartime meat scarcities. Fresh State of Maine lobsters were Air-Expressed cross-continent overnight to a Spokane seafood market. Local newspapers carried pictures of The Flying Lobsters—their preferred billing!—still alive and kicking as they were unloaded from the express compartment of a transcontinental transport.

If these Maine lobsters make a hit, this Spokane seafood house plans to air express shrimp from Louisiana, fresh king crab from Alaska, and clams and shell oysters from the East Coast to further satisfy the wartime-stimulated palates of its customers.

"SHAUN" GOES HOME

DOG BREEDERS are using Air Express service increasingly to dispatch pedigreed pets to new owners, the Air Express Division of Railway Express Agency reports. For instance, a recent skyway traveler from Ohio to Arizona was "Shaun", an Irish setter. After posing for bon voyage pictures at the REA office at Uhrichsville, Ohio, "Shaun" went by Rail Express to Columbus. There he was transferred to Air Express service and flown to his new owner in Phoenix, Arizona.

"A doggone nice trip," grinned "Shaun" as the REA express truck pulled away from the Phoenix airport, bound for the setter's new home.

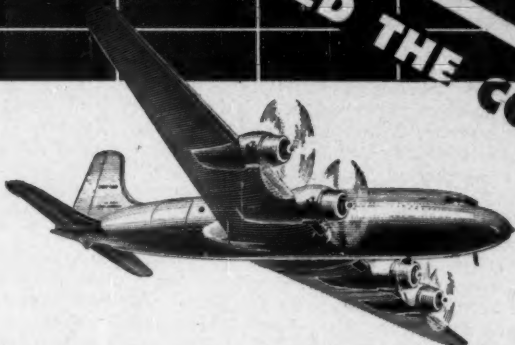
OVER THE BORDERS

OUR International Air Express business is making news nowadays, chalking up record increases each month. September shipments were up 59.6 per cent over September a year ago. A total of 39,455 shipments were interchanged at 13 international gateways compared with 24,714 shipments. Traffic flown to foreign countries maintained a better than 3 to 1 ratio over air imports during the month.

The Miami gateway ranked first in volume of international air express with 19,782 shipments, followed by New York, 4,918 shipments, and Brownsville (Texas) 4,387 shipments.

WE'VE SPEEDED
THE SERVICE
INCREASED
THE FREQUENCY

LOWERED THE COST



Plenty of room now for your Air Express shipments!

More and Bigger Planes in the service of the Airlines mean even faster delivery for your Air Express shipments. Speeds up to five miles a minute now make overnight coast-to-coast deliveries routine.

Greatly Lowered Costs! Today Air Express is a better value than ever. Included in the cost is special pick-up and delivery in all major U. S. towns and cities. Same-day delivery between many destinations. Rapid air-rail schedules to 23,000 off-airline communities.

Air Service Abroad to and from scores of foreign countries and the U. S. It's the world's best service, in the world's best planes.

Write Today for the Time and Rate Schedule on Air Express. It contains illuminating facts to help you solve many a shipping problem. Air Express Division, Railway Express Agency, 230 Park Avenue, New York 17, N. Y. Or ask for it at any Airline or Railway Express Office.

RATES CUT 22% SINCE 1943 (U. S. A.)					
AIR MILES	2 lbs.	5 lbs.	25 lbs.	40 lbs.	Over 40 lbs. Cents per lb.
149	\$1.00	\$1.00	\$1.00	\$1.23	3.67c
349	1.02	1.18	2.30	2.68	9.21c
549	1.07	1.42	3.84	6.14	15.33c
1049	1.17	1.99	7.68	12.28	20.70c
2349	1.45	3.53	17.65	28.34	70.61c
Over 2350	1.47	3.68	18.42	29.47	73.68c

INTERNATIONAL RATES ALSO REDUCED

AIR EXPRESS
GETS THERE FIRST

Phone AIR EXPRESS DIVISION, RAILWAY EXPRESS AGENCY
Representing the AIRLINES of the United States

Distances and Air Freight

"The pressing need is for the development of complete nationwide air freight systems."

By JERRY MARTIN, Market Analyst, Fairchild Aircraft Division, Fairchild Engine and Airplane Corporation

The material presented in this report was compiled for the purpose of making available to air freight operators a comparison of the great circle, airline route, highway and rail distances between the largest cities in the United States.

Of the distances given, the great circle mileages are the most useful to the air freight operator.* However, the rail, airline route, and highway distances are important because they afford a means of resolving rail, motor and airline rates to basic ton-mile values as well as providing a direct comparison of the competitive advantages, in terms of distance, of one mode of transport over another.

A differentiation is made in the report as to the great circle distance and airline route distance between cities. The two distances may be, but usually are not, one and the same. The great circle distance is measured along the shortest direct track between only two points, whereas the airline route distance is the aggregate of the distances between all intermediate points and is dependent upon the route patterns of the airlines.

The rail distances used are those which are described as short-line distances and are employed by the Interstate Commerce Commission and the railroads in fixing rates between given cities. They constitute a compilation of the distances over any combination of railroad routes which results in the shortest distance between the cities. Highway distances used reflect the distances between cities utilizing the principal highways. The most direct routes via primary highways were selected. Secondary and unimproved roads not suitable for through, all-weather traffic were excluded.

The great circle distances are scaled distances from center-of-city to center-of-city and are not airport-to-airport distances as are the airline route distances. Many cities now have several airports suitable for commercial use, and in the future additional airports will be constructed at new locations. The use in this report of center-of-city distances has the merit of avoiding confusion which would arise when commercial operations are shifted from one airport to another, resulting in different airport-to-airport mileages. The center-of-city to center-of-city distance will remain fixed, whereas the airport-to-airport distance will vary. For some cities this variance in points of measurement results in less than the great circle distance, and more than the great circle distance in others. However, this limitation cancels out when a large number of cities are compared. The shorter distances are averaged in which the longer distances with the result being an average distance not affected by airport location.

Most of the material in this report was compiled from responsible and established sources, and is considered as reasonably reliable. Every care was exercised to minimize the probability of error.

THE summary of distances set in the box on the next page is the non-duplicated total of the great circle, airline route, highway, and rail distances between the 50 largest cities of the United States.** (The summation of airline route distances represents an average of nonstop and complete point-to-point distances. This gives the effect of skip-stop schedules, but in individual cases the airline route distances are often larger than particular skip-stop schedules. The author did not attempt to select given schedules between cities because of the many variables and complexities involved. His

prime interest was in investigating the general route patterns as such and not of schedule possibilities.)

In order to provide a sufficient number of cities to give a wide dispersion over the United States and, at the same time, to include a large proportion of the total population, it was decided to select the 50 largest cities based on the 1940 census. Fifteen or 20 cities would not have been sufficient because it would have been necessary to ignore either rank in population in order to give dispersion or to sacrifice dispersion in preference to including the largest of the cities.

The inclusion of more than 50 cities did not offer particular advantages in dispersion, and the inclusion of additional population alone did not appear to merit the added work involved. By adhering strictly to rank of population, several cities were listed separately which could have been considered together, such as Minneapolis-St. Paul,



Jerry Martin

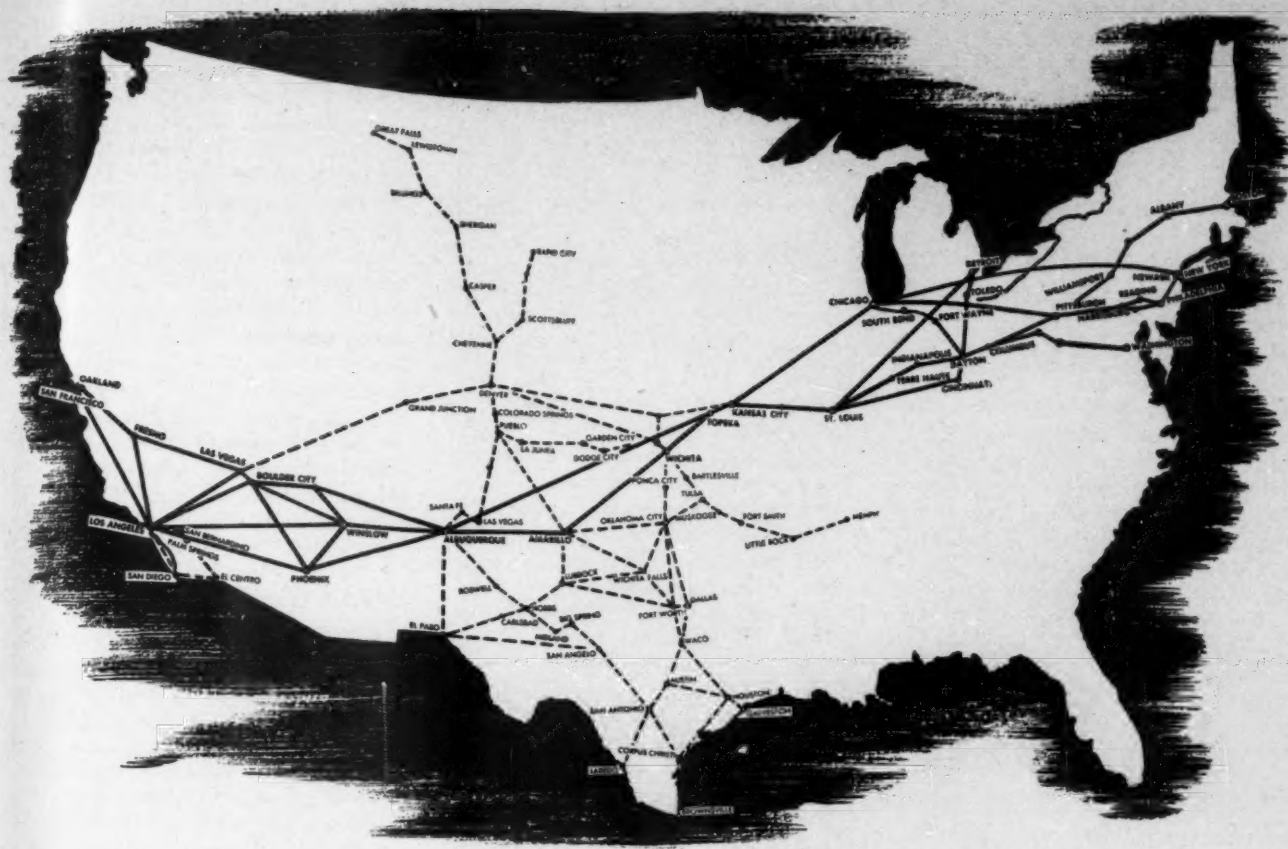
Jersey City-Newark, and Oakland-San Francisco. Since treating them separately interposed no particular problem and in no way affected the validity of the study, it was deemed best, from the standpoint of being consistent, to list them separately.

The 50 cities had an urban population in 1940 of 32,733,181. The population of the counties containing these cities, was 41,137,535. Since these cities serve a wide trades area beyond their city limits, the inclusion of county population figures is more representative of their general metropolitan areas and, at the same time, affords a ready comparison with the value of manufactured products and the total retail sales given for counties rather than for cities.

If the entire trades area of the cities had been considered, the total population served by these 50 cities would probably have been between 45 percent and 50 percent of the total United States population. Value of manufactured products and total value of retail sales would have exceeded 50 percent of the United States totals. Thus the establishment of these 50 cities as the ones to study with respect to the competitive advantages of the various forms of

*A complete breakdown of the distances, city by city, will be made available by writing AIR TRANSPORTATION.

**Akron; Atlanta; Baltimore; Birmingham; Boston; Buffalo; Chicago; Cincinnati; Cleveland; Columbus, O.; Dallas; Dayton; Denver; Detroit; Fort Worth; Houston; Indianapolis; Jacksonville; Jersey City; Kansas City; Los Angeles; Louisville; Memphis; Miami; Milwaukee; Minneapolis; Nashville; Newark; New Orleans; New York; Oakland; Oklahoma City; Omaha; Philadelphia; Pittsburgh; Portland, O.; Providence.



TWA—Trans World Airline ———
connecting airlines-----

Every TWA Flight Carries **AIRFREIGHT**



Airfreight—sent the TWA way—reaches its destination surely and swiftly. TWA carries **airfreight** on *all* flights, whether they be regular passenger planes or all-cargo Skyfreighters.

Furthermore, TWA offers the most extensive common-carrier **airfreight** service in existence.

If you ship TWA, your goods can be rapidly delivered to any one of 82 major cities, embracing 820 trading areas. Rates have been reduced—and we now feature the same low rate for all commodities.

Schedules and complete details will be cheerfully furnished at our nearest **airfreight** office.

Less Transit Time—More Sales Time

Also: Direct one-carrier **INTERNATIONAL AIR EXPRESS** anywhere in Newfoundland, Ireland, France, Switzerland, Italy, Greece and Egypt

COMPARISON OF THE GREAT CIRCLE, AIRLINE ROUTE, HIGHWAY, AND RAIL MILEAGES BETWEEN THE FIFTY LARGEST CITIES IN THE UNITED STATES

	Distance in Statute Miles	Percent in Great Circle	Percent of Airline Route	Percent of Highway	Percent of Rail
Great Circle	1,178,202	100.00	86.05	83.62	81.70
Airline Route	1,369,180	116.21	100.00	97.17	94.94
Highway	1,409,067	119.55	102.91	100.00	97.71
Rail	1,442,115	122.40	105.33	102.35	100.00

transport has the merit of giving coverage to approximately 50 percent of the commerce of the United States.

One of the prime objectives of this study was to examine the limitations of the present system of airline routes which have been developed on the basis of a passenger service pattern. To do this, it was believed necessary to inspect airline routes with attention to the ability of carriers to give "through" service between given points rather than to determine a combination of routes irrespective of carrier which would produce the shortest distance.

One Carrier

Where one carrier served both the points or origin and destination, it was believed reasonable to assume that air freight shipments would go by one carrier rather than by an interchange between carriers at an intermediate point. Transfer at the intermediate point would probably delay the shipment more than the following of a slightly longer route over one carrier's system. However, if reverse direction routing was involved such as to require a reversal of normal direction of entry into a city, a two-carrier route was selected in preference to that of one carrier. This method had the effect of increasing airline route distances slightly, but it also had the desired effect of producing mileages which would be representative of the actual distances to be flown if air freight service by the airlines follows their passenger service pattern. In fact, it can be assumed that a large number of reverse direction routes involving considerable circuitry will be flown under competitive conditions.

Of the 1,225 separate distances between the 50 cities, 765 or 62 percent of them can be handled over one-carrier routes. The remainder can all be served with two-carrier connections. Two-carrier connections do not always provide the shortest possible distances. This is because the same method was followed here as in one-carrier routes, and is based upon the assumption that a two-carrier service will afford better time service than interchange between three or four carriers. Under competitive conditions, it is reasonable to assume that

two-carrier service will be the actual practice. In order to avoid placing an undue penalty on airline route distances through strict adherence to a competitive approach, the interchange point between carriers was selected on the basis of the shortest possible two-carrier route. Under competitive conditions the originating carrier probably will not interchange with another carrier until he has realized the maximum haul his route will permit. This competitive urge will undoubtedly result in increasing the total distance freight moves over airline routes, and will serve to increase the airline route distances used in this report.

Nonstop distances in effect on February 1, 1946, were used in computing distances between cities having one-carrier service, but they were not used for two-carrier. It was believed that scheduling between carriers would not be so integrated as to utilize nonstops altogether on connecting schedules with other carriers. There would undoubtedly be numerous instances, but it was considered best to use point-to-point distances rather than nonstop on connecting schedules. Then too, a considerable

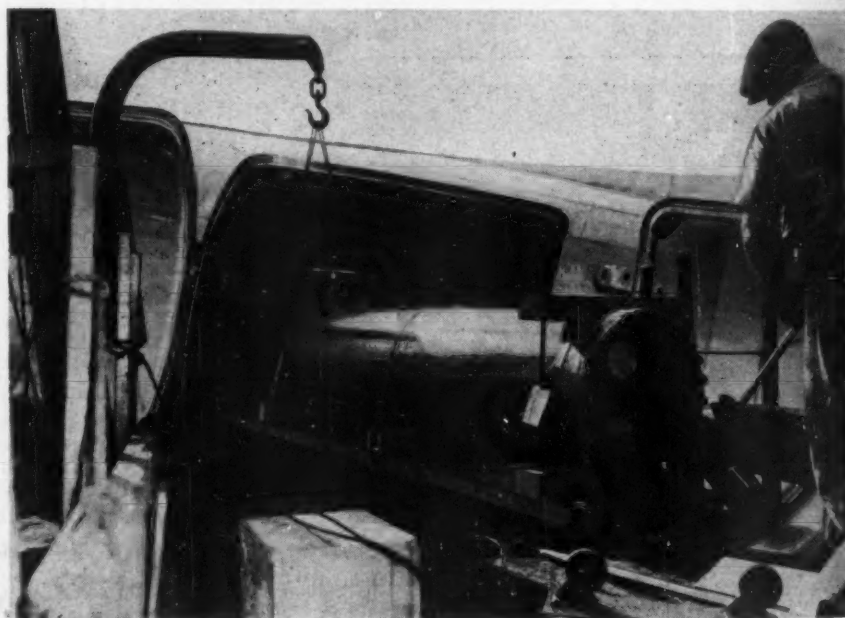
portion of the distances granted nonstop mileage probably will be flown point-to-point under normal conditions.

The Civil Aeronautics Board's *Mileage Book No. 1*, revised as of February 1, 1946, was used in establishing the airline mileages between cities. The selection of routes to be followed was based upon the CAB *Status of Certificated Routes* as of October 15, 1945, modified for new service as of February 1, 1946. Airport-to-airport mileages providing for stops at all certificated points were used where nonstops between cities were not provided. Free movement over any one carrier's system was permitted without respect to particular route limitations. It was assumed that operating limitations would not be sufficiently restrictive to warrant undue consideration of this feature.

Credit Given

Most of the great circle mileages were taken from a study prepared by Air Cargo, Inc. This study based the great circle mileage from center-of-city to center-of-city rather than from airport-to-airport. The distances were scaled and are subject to minor errors. No allowance was made for curvature of the earth. Highway distances were taken from the Household Goods Carriers' Bureau *Mileage Guide No. 4* which used the Rand McNally arterial routes in computing distances.

Rail distances were compiled from a number of sources, including the Board of Investigation and Research created by the Transportation Act of 1940, the Transportation Section of the OPA, the Rand-McNally and Company, the St.



COAST TO COAST—Eighteen feet long and weighing more than 6,000 pounds, this huge horizontal shell and tube brine cooler, was transported overnight by the Flying Tiger Line, from Newark to the El Modena Citrus plant in Orange, California. The air freight shipment sliced 10 days from the arrival time.

Louis Southwestern Railway Lines, and the Pennsylvania Railroad. They represent the shortest possible distance by rail, and are referred to as short-line distances. In railroad rate making the short-line distance is used for comparative purposes although actual movements involve an average of 110 percent or more of the short-line mileage.

The great circle mileage represents the net mileage that goods move. It serves as the master mileage in terms of the service rendered to the shipper. When it is necessary for the carrier to traverse a greater distance than the great circle mileage, a penalty in service is involved which must be absorbed by the shipper. In the case of the railway and highway carriers, very little improvement in the route miles can be achieved because the basic framework of the roadbeds have already been laid. Some minor improvements are possible, to be sure; but the total system would be affected very little without a tremendous expenditure of capital and public funds. To say the least, such a venture is not likely within the foreseeable future.

Suggested Service

However, this is not the case in air transportation. It is entirely possible to establish a system of air freight service approximating great circle mileages with a minimum of difficulty. There are no heavy capital investments required to set up such a service. The Civil Aeronautics Board could so modify existing route certificates to permit the certificated airlines to operate direct nonstop flights between volume traffic generating points, or they could certificate new air freight operators on that basis. In fact, from the standpoint of regulated competition, it would appear desirable for the CAB to establish several nationwide or trunk-line air freight operations capable of rendering direct "through" service to key points throughout the United States.

Under the present route systems of the passenger airlines, the service they



HEAVY CARGO BY AIR—Five Fairchild Packets shown in flight—45 tons of freight on the wing. Says the author: "With enlightened planning and judicious promotion, the air freight industry should experience a cycle of growth culminating in traffic volumes several times that of passenger service."

can render will be limited unless the CAB sees fit to modify their certificates sufficiently to omit all stops at many intermediate points. One of the answers may be for the passenger airlines to combine and form a unified air freight system on a national basis. Regulated competition could be brought about by certificating present non-scheduled and contract air freight operators on a national basis. Since mail pay is now approaching a service rate and present thinking is to authorize the transportation of all first class mail by air where mail service would thereby be improved, such national systems of competitive services between key air freight points appears to have considerable merit. Not only would improved shipper service come about, improved mail service would be realized as well.

The air freight industry cannot afford to be shackled with a railroad service pattern if it is to realize maximum service to the shipping public. The railroads can interchange freight cars between lines because they have standardized them. This is not true of their motive power, the railway steam engine and the diesel, which are far from standardized. The air freight industry would be even more severely handicapped in working out interchange of airplanes than the railroads would be with their custom-built motive units. In fact, it took many years for the railroads to work out satisfactory interchange arrangements of even their freight cars. With the highly specialized maintenance requirements of the airplane and the divergence of opinion as to equipment requirements by experienced operators, the prospect of working out any kind of arrangement as to interchange of equipment is remote to say the least.

The efforts by the trucking industry to effect interchange agreements has been most unsatisfactory. Trailers are certainly more standardized than airplanes, yet freight is loaded and unloaded between motor carriers although admittedly more expensive than a work-

able interchange agreement. Thus we have the prospect before us of a difficult operating problem if air freight is not permitted to develop on a national basis rather than only on a regional basis. A few transcontinental operations among selected cities will not give a complete service. The public will be denied much of the service potential inherent in air freight.

No Answer

Although certainly an improvement over the present confused situation of each airline issuing a separate and differing tariff for the cities it serves with perhaps one or two participating carriers, the proposed interline tariff by the majority of the airlines is not the answer to the problem. This development will not bring about the unification of service that is needed. The shipper must still deal with a large number of carriers, and the expense of loading and unloading shipments between carriers will still be present, not to mention the distance penalties revealed by this report.

We, of course, cannot hope to establish complete air freight systems on a national basis overnight. It will take considerable time and study to build the type of organizations which are needed. However, now is the time to lay the basic framework of such systems. The danger lies in the possibility that short-range planning may handicap the development of the maximum potential of the air freight industry.

It is the primary concern of the Civil Aeronautics Board to do two things: first, to serve the convenience and necessity of the people; second, to promote the development of air commerce. If the present system of air routes which was designed to serve traffic flow patterns, as they existed in 1938 and as modified to the present time, is a adequate for maximum service by the air freight industry, there is no insurmountable barrier to their change.

There is no place for both national

Some Economic Characteristics of the 50 Cities Selected

A. Population—1940		
	Total	Percent
City	32,733,181	24.86
County	41,137,535	31.24
United States	131,669,275	100.00
B. Value of Manufactured Products—1939		
City-County	\$27,327,457,665	47.92
United States	\$57,029,873,571	100.00
C. Retail Sales—1939		
City-County	\$17,694,707,000	42.09
United States	\$42,038,448,000	100.00

and regional air freight carriers in the air freight industry, just as there is a place for both the presently certificated carriers and the new air freight carriers currently operating as non-scheduled and contract carriers. However, the pressing need is for the development of complete nationwide air freight systems.

Upon the basis of the distances developed in this report, rail mileage is only 5.33 percent greater than the airline distance. This is a relatively small advantage for the airlines to enjoy when it is possible to reduce airline mileage so as to make the rail distance 22.40 percent greater than the airline. This condition certainly argues in favor of the establishment of an air freight system designed to exploit fully the savings in distance possible with the air freighter. Speed is the essence of air freight service, and any sacrifice of this element is to be avoided as carefully as sacrifice of payload. Engineers labor long and carefully to produce an extra pound of payload. Since the block-to-block time of shipment is the principal sales feature of air freight, each mile saved in developing an air freight system is of prime importance. It should receive at least as much attention as is given to weight control.

A reduction in course miles lowers the cost of operation and makes possible a reduction in rates, and at the same time offers a faster service. This fact does not go unrecognized in the air freight industry. It is mentioned here merely to emphasize the advantage which would accrue to a national air freight service established independently of the present passenger route systems.

The trucking industry has a net mileage increase of only 2.91 percent over the airlines. However, their total increase over the great circle mileage is 19.55 percent. Here again, we see a potential advantage for air freight not yet exploited. The highway carrier, of course, has a far greater flexibility of service than does the rail carrier. Also, it can be expected that the most ideal range for the motor truck is for hauls of 300 miles and under. This suggests that an integrated service of air and highway carriers would offer a complete, speedy service with each carrier functioning in that sphere to which it is best adapted—the air freighter for medium to long hauls between key traffic generating points and the motor truck for short hauls in the general trades area of the key points.

From any one of the 50 cities studied to all of the other 49, an average of 47,138 great circle miles was found. This yields an average of 962 great circle miles between cities. This figure would be greater except for the heavy concentration of large cities in the east-

ern part of the United States. This concentration tended to reduce the average distance, but the lack of many large cities in the central part of the United States had the opposite effect. The average distance by airline is 1,118 miles; by highway, 1,150 miles; and by rail, 1,177 miles.

The advantage of following the great circle path to and from large cities has been sacrificed in favor of the establishment of point-to-point routes which has resulted in dissipating a good portion of one of the prime advantages air transportation holds over surface transportation. The air freight industry should strive to establish a service pattern which will exploit great circle routes to the fullest extent possible. The present pattern of routes of the certificated airlines is not so constructed as to offer the desired directness of service between the 50 largest cities in the United States.

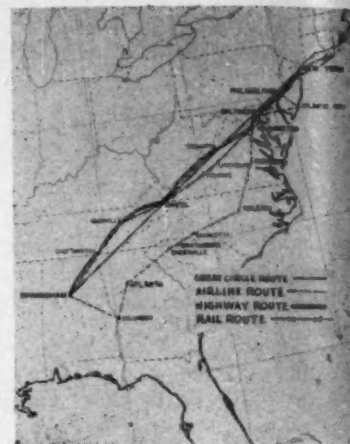
In addition, a complete one-carrier service is needed between these major traffic generating points. Interchange of freight between carriers serves only to slow down service and to increase the cost of shipment. It costs much more money to load and unload freight than it does passengers. The passenger can do the job himself, but the freight cannot.

Then, too, the shipper would prefer to do business with one carrier in a position to handle all of a given series of shipments rather than to be compelled to deal with several airlines for national coverage. Of course, the shipper wants several carriers for competitive reasons, and this is desirable; but these several carriers should each be in a position to offer nationwide service.

A system of regional carriers is also desirable to complement the national system. These regional carriers could offer a combined local and regional trunkline service.

It would appear desirable for the CAB to be encouraged to give serious attention to the possibilities of promoting the development of single-carrier national air freight services rather than to follow the pattern set up in passenger routes which appears rather outmoded.

With enlightened planning and judicious promotion, the air freight industry should experience a cycle of growth culminating in traffic volumes several times that of passenger service. The American people are quite willing to pay for improved transportation services. The railroads would never have developed their transcontinental rail system in competition with the extremely low rates of coastwise steamship lines if they had not had confidence in this trait of the people. Neither would the trucking industry, in competition with the railroads, have developed as it has



Comparison of the Great Circle, Airline Route, Highway, and Rail Distances between Birmingham and New York City

I. GREAT CIRCLE	
Birmingham to New York	863 Miles
II. AIRLINE ROUTE	
Birmingham to Columbus	129 Miles
Columbus to Atlanta	90 "
Atlanta to Greenville	145 "
Greenville to Spartanburg	22 "
Spartanburg to Charlotte	42 "
Charlotte to Raleigh	180 "
Raleigh to Richmond	139 "
Richmond to Washington	95 "
Washington to Baltimore	40 "
Baltimore to Atlantic City	111 "
Atlantic City to Philadelphia	54 "
Philadelphia to New York	96 "
Total	1163 Miles
III. HIGHWAY	
Birmingham to Chattanooga	150 Miles
Chattanooga to Knoxville	114 "
Knoxville to Bristol	120 "
Bristol to Staunton	235 "
Staunton to Washington	150 "
Washington to Baltimore	38 "
Baltimore to Philadelphia	97 "
Philadelphia to New York	88 "
Total	994 Miles
IV. RAIL	
Birmingham to Chattanooga	143 Miles
Chattanooga to Knoxville	111 "
Knoxville to Bristol	131 "
Bristol to Roanoke	152 "
Roanoke to Lynchburg	53 "
Lynchburg to Washington	173 "
Washington to Baltimore	40 "
Baltimore to Philadelphia	96 "
Philadelphia to New York	91 "
Total	990 Miles

if the people had not desired and been willing to pay for speedier service. We cannot say less for the air freight industry than has been demonstrated by the rail and motor industry.

Civilization is a function of communication and transportation. Free and unhampered development of speedier and more convenient forms of transportation can only result in accelerating the progress of civilization. We are confident that the air freight industry will be permitted to expand and develop to the point where it will contribute a full measure of service to the American people.



YOU WIDEN YOUR MARKETS WHEN YOU SHIP BY CLIPPER

One of ten good reasons why both
your consignee and you will find
Clipper Express a good business buy



1. Speeds delivery.
2. Dealers cash in while the demand lasts.
3. Dealers can operate on smaller inventories.
4. Less loss through obsolescence.
5. Quicker turnover.

And it's good for you, too

6. Creates new markets, widens old ones.
7. You can produce for *all* markets at once.
8. Cuts down on warehousing abroad.
9. Less tied-up capital.
10. Simplifies documents and bookkeeping.



Be sure to ask your consignee to
specify **Clipper Express**

You can ship by
CLIPPER EXPRESS
to 46 lands

Alaska	Haiti
Antigua, BWI	Hawaii
Argentina	Honduras
Austria	Ireland
Bahamas	Jamaica, BWI
Belgian Congo	Liberia
Belgium	Mexico
Bermuda	New Zealand
Bolivia	Nicaragua
Brazil	Panama
Canal Zone	Paraguay
Chile	Peru
Colombia	Portugal
Costa Rica	Puerto Rico
Cuba	St. Lucia, BWI
Curaçao, NWI	St. Thomas, VI
Czechoslovakia	Senegal
Dominican Republic	Surinam
Ecuador	Trinidad, BWI
El Salvador	United Kingdom
England	Uruguay
French Guiana	Venezuela
Guatemala	Yukon Terr., Canada

Pickup for Clipper Express in every city and
principal town in the U. S. by Railway Express
Agency, Inc., at no extra charge.

PAN AMERICAN WORLD AIRWAYS



*The System of the
Flying Clippers*

FIRST ACROSS THE PACIFIC - FIRST ACROSS THE ATLANTIC
FIRST THROUGHOUT LATIN AMERICA

Why Orphan The Domestic Freight Forwarder?

By JOHN F. BUDD

Publisher, AIR TRANSPORTATION

Chairman, Aviation Section, NEW YORK BOARD OF TRADE

MORE than two years ago I began my efforts to convince the International Air Transport Association that recognition of the foreign freight forwarder by the airlines of the world would benefit the industry as a whole by creating new foreign air freight traffic. Five percent brokerage to these foreign freight forwarders have finally been recommended by the IATA, and currently several thousand questionnaires are being distributed among bona fide eligibles now engaged in business with surface transportation lines.

But what about the domestic freight forwarder? What about that fellow upon whom the railroads and motor carriers have come to lean for a substantial part of their freight business? What about the hard working chap who has it within his power to give domestic air cargo the biggest boost in history? How about that expert who has plenty of know-how in the matter of consolidating shipments? Yes, the domestic freight forwarder—an orphan, so far as the Civil Aeronautics Board is concerned.

The domestic freight forwarder is a recognized and important cog in the American transportation wheel. His wares are lower rates through freight consolidation, speedier service, and full responsibility for shipments from the shipper to the consignee's door.

The railroads always went out themselves for the full carload business, but experience has taught them that the freight forwarder can do a better job in the LCL (less than carload) business. As a middleman between the shipper and the carrier, the freight forwarder derives his profits from the difference in rates between carload and LCL shipments. Unlike our peace conferences, everybody is happy and everybody is making money through his services.

Since air transportation is merely one form of transportation having problems common with the other forms, why have the aviation bigwigs turned

A compelling argument in favor of the recognition of the domestic freight forwarder by the Civil Aeronautics Board.

a cold shoulder to the forwarder? I can only attribute that to the dangerous inexperience or density of those in the saddle seat. Or perhaps it is misguided ultra-conservatism.

My argument for the CAB recognition of the freight forwarder would not be substantial if I did not buttress them with some statistics. At the present time there are approximately 100 freight forwarders licensed by the Interstate Commerce Commission. Last year, just 51 per cent of these firms—or roughly half of the total—shipped via surface lines more than 4,128,000 tons of freight, representing over 16,613,000 individual shipments. Trans-

10,000 strong, ready to bend their efforts in the direction of air freight transportation, but hampered by a static CAB.

Here is a tailor-made industry that is a "natural" for the fastest form of transportation known. Here is a tremendous business organization, fully recognized by the surface lines, but relegated to the background as a babe-in-the-woods by those officials who must stand the responsibility for retarding the full development of air freight.

The airlines of the United States have no reason to rush about madly for cargoes to fill their planes both ways, or endeavor to build up a tremendous sales organization, particularly in these days of labor shortages. The freight forwarder has more than enough business to throw their way, but when are the officials in Washington going to put on their thinking caps and recognize him as the ICC did long ago? What are they waiting for?

Universal Air Freight, a subsidiary of the Universal Carloading and Distributing Co., was organized several years ago for the purpose of consolidating air shipments. The company considered itself a shipper, because it was the opinion of the Supreme Court that in his relationship with the carrier the freight forwarder was nothing but a shipper. But the CAB disagreed, finding that special circumstances made Universal Air Freight a carrier, which made necessary a certificate of public convenience and necessity. As a result, the CAB forced Universal to cease operations.

There's a postscript to this bit of information. In spite of the CAB ruling, there are numerous air freight forwarders in operation today. Apparently, these operations are in violation of the law. It will be interesting what action the government will take.

On November 8, John F. Budd addressed the Aero Club of Buffalo, oldest aviation group in America, and came out flatly for recognition of the domestic foreign freight forwarder by the Civil Aeronautics Board. The resultant volume of communications received in the offices of Air Transportation indicates the wide interest in the subject awakened by Budd.

portation revenue—rail, water and motor—topped 169½ million dollars, all domestic business.

Earlier this month, in an interview with a high executive of one of the largest freight forwarding concerns in this country, I was informed that his company employed 200 men as a working sales force. Upon further questioning, I learned that there are about 10 firms in the United States with comparable sales organization—which give us 2,000 men. It was roughly estimated that the balance of 90 forwarding companies had some 8,000 men in the field.

This, then, is the picture which presents itself—a trained sales force of

The ICC amply covers the freight forwarder shipping by surface means. I have often wondered why a freight forwarder hasn't ever petitioned the ICC to add the word "air" to cover all transportation elements. This naturally would bring a head-on collision between the ICC and the CAB. I am not suggesting or recommending anything. It is merely something to think about in view of the present plight of the freight forwarder.

It is to the credit of the airlines that they were quick to recognize the advantage of using ticket or travel agents, and pay them fair brokerage on domestic as well as foreign air travel, not to mention the recent recognition of the foreign freight forwarder. So why discriminate against domestic air freight—something which, within the

next few years, will be giving the airlines more revenue than through the sale of passenger tickets?

Only a few weeks ago AIR TRANSPORTATION polled 19 of the biggest scheduled and non-scheduled airlines on just this subject. In 18 out of the 19 replies, all signed by died-in-the-wool air transportation leaders, there was definite expectancy of the air freight business overtaking and by-passing the air passenger business in from three to 10 years. The 19th reply diplomatically straddled the fence.*

I agree with the 18 experts, but I deny that there will be a maximum flow of business unless the domestic freight forwarder is rightfully brought into air transportation's scheme of things.

* See October, 1946, AIR TRANSPORTATION.

LaGuardia Airport to Give Way to Floyd Bennett Field

Frederick G. Reinecke, New York's Commissioner of Marine and Aviation, has revealed that LaGuardia Airport will have to be closed for reconstruction within nine months to two years because the eastern end of the field is sinking at the rate of six inches a year, and at the present time is partly under water at high tide. Since the airport was built in 1939, it has sunk from three to five feet.

Referring to Floyd Bennett Field in Brooklyn, which will be opened to commercial traffic, Reinecke said:

"We are desperately trying to create facilities to catch up with our needs. The increase is such that we can't possibly keep up with the needs even though we are extending our facilities to the limit within the restrictions under which we work."

Initial operations at Floyd Bennett are expected to take place this month. It has been estimated that within four months the field will be handling 150 arrivals and departures a day.

No-Show Service Charges Of 25% are now in Effect

A service charge of 25 percent of one-way fares on domestic airline tickets not cancelled by flight departure time, was inaugurated by the scheduled airlines last month.

Another phase of a program designed to provide more airline seats by alleviating the no-show passenger problem requires airline patrons who do not intend to make use of remaining portions of their tickets to pay the 25 percent service charge, unless they notify the airline upon which their next departure is scheduled by the actual departure time of the flight. The passenger may inform the airline of his intention not to use the ticket either in person, by telephone, telegram, or mail, providing the information reaches the airline office in the city from which the departure was to be made, prior to the departure time of the flight.

The first phase of the airlines' no-show program merely requires the passenger to inform the airline office in the city from which his departure is scheduled, a specified number of hours prior to departure, of his intention to use the reservation he had previously made. Failure to inform the airline office results in the right of the airline to cancel his reservation and resell the space.

In cases where 25 percent of the one-way fare for the remaining portion of any passenger ticket not properly cancelled reaches a figure less than \$2.50, the service charge applicable under the new ruling is \$2.50. If the total one-way fare in question is less than \$2.50, the service charge is the total amount of the fare.



You can SPEED UP EXPORT-IMPORT SHIPPING!— with AMERICAN EXPRESS FOREIGN TRAFFIC SERVICE

For more than fifty years the American Express Company has been handling the many problems of export and import shipping for American firms. American Express services include

- ★ Booking of Steamer Space
- ★ Marine Insurance Placement
- ★ Warehousing
- ★ Air Clearance and Forwarding
- ★ Documenting to Destination
- ★ Ocean Bills of Lading
- ★ Consulation of Documents
- ★ Customs Clearances
- ★ Collections against Letters of Credit

Whatever the shipping detail, American Express offers a full technical service. American Express is also General Foreign Freight and Passenger Traffic Agent for the New York Central System.

The demand all over the world for American products is growing. The need for experienced and special handling is acute. The profits go to the shipper who reaches the markets promptly, efficiently, economically. The American Express Foreign Traffic Service is ready to help you do this. Your inquiries are invited.

AMERICAN EXPRESS

Foreign Freight Forwarders

Custom House Brokers

65 Broadway—New York 6, N. Y.

180 No. Michigan Ave.—Chicago 1, Ill.
253 Post Street—San Francisco 8, Calif.
Marine Terminal—La Guardia Field, N. Y.

177 Milk Street—Boston 9, Mass.
Sun Life Building—Montreal 2, P. Q.
Villalonga—American Express Co.—Buenos Aires

1 Canal Street—New Orleans, La.
19 Melinda Street—Toronto, Ont.
S.A.V.I.—Rio de Janeiro, Brazil

IT'S AN WORLD

[REG. U. S. PAT. OFF.]

By L. A. GOLDSMITH, *Economic Analyst*, AIR TRANSPORTATION

ON THE AIR-SAFETY SIDE

AT the request of the Provisional International Civil Aviation Organization, the radio industry of this country together with United States agencies, presented a three-week demonstration of American-made air navigation aids before the representatives of 46 countries. This demonstration, which took place at Indianapolis, followed an official grand-scale display of British air navigation aids, the cost of such demonstration having been paid for by the British Government.

The objective of the Indianapolis show was to give American manufacturers the opportunity of presenting their air navigation developments to the official representatives of the countries who had already viewed the exhibition of British products. Afterward, the more than 200 delegates proceeded to Montreal, where the selection of uni-

form international aviation standards are to be decided upon. Among the American companies participating in the Indianapolis demonstration were Sperry Gyroscope, International Telephone and Telegraph, Radio Corporation of America, Bendix Radio, General Electric, American Telephone and Telegraph, Hazeltine Electronics, Lear, Westinghouse, Western Electric, and Minneapolis-Honeywell.

After Montreal, what next? That is the whole point of the British and American demonstrations. PICAQ will decide on the selection of air navigation devices for uniform world-wide use by the member nations. To a great extent, this decision will determine who gets the benefit of the estimated \$100,000,000-a-year business, which the present rate of aviation development would seem to indicate as needed.

Some groups have pointed up this angle of "who gets the business" more or less as a competitive race between Great Britain and the United States, depicting the manufacturers of both nations as straining at the leash in order to get the lion's share of this juicy plum. This seems to be too much of a sweeping generalization to speak of serious competition in terms of a world trade struggle. There are many variations of such an important theme, especially when it comes to so vital a factor as world aviation.

For instance, it is hardly likely that PICAQ will decide in favor of all American or all British devices. It surely will be a question of selecting those which seem to be the most suitable for all-around conditions in a world-wide system of aviation interchanges and transportation. In talking with some of the delegates to the Indianapolis and Montreal meetings, this question of selections was brought up, and it was generally conceded that PICAQ would not be likely to make too drastic changes all at once, so that it would be necessary, as one man put it, "to junk existing valuable equipment." The general opinion expressed was that the evolution would be comparatively gradual, and made in such a manner that no planes would have to abandon imme-

NEW LOW COST

Air 

FREIGHT

for **MERCHANDISE SHIPMENTS**

Schedule your shipments as you would personal reservations —by date and flight number—Be certain of "ON TIME" deliveries at destination.

TYPICAL RATES

Newark - TAMPA or MIAMI - \$15.08 CWT.
Newark - JACKSONVILLE - 12.43 CWT.
Newark - NEW ORLEANS - 16.40 CWT.
New Orleans - MIAMI - 9.78 CWT.



HAVANA

NATIONAL AIRLINES

ROUTE OF THE BUCCANEERS

diately all devices now in use, but that certain types of new air aids would be gradually adopted for simultaneous international use.

"Why limit the possible selection of new navigational air aids to the United States and/or Britain?" one foreign delegate asked. "Other nations in the world have marked engineering and inventive ability, although they may not possess the technical productive processes inherent in American industry, nor the necessity for a drive on world trade which Britain needs so desperately."

In this connection as regards other nations having inventive ability and engineering, it is interesting to note that Italy has developed two vital navigational air raids. One of these is a paper parachute, invented by an engineer named Aymone Regoli. This parachute was a wartime invention and hitherto kept strictly under wraps. It is reported that the chute is made from ordinary wrapping paper; it is not treated in any way, but owing to special construction, it collapses entirely as soon as it touches earth. This is considered a distinct advantage as it eliminates the possibility of parachutists being injured when dragged over rough ground. In addition to its claim for better technical qualities the paper parachute also has this advantage: it can be produced at a greatly reduced cost.

The second Italian invention, which consists of a device for decreasing wind resistance, is the work of Giuseppe Volpi. It is claimed that experiments with this device showed that the coefficient of resistance decreased by about 40 percent. Also reported was that a small Italian fighter plane equipped with this device increased its speed by 125 miles an hour.

Guido Mattoli, editor of *Aviazione*, Italy's leading aviation periodical, is responsible for bringing these Italian inventions to public notice.

And now for a few words concerning teleran, shoran, loran, lanac, and navar. Most of these cryptic names created for the new air navigational aids are telescoped contractions covering a number of technical (mostly wartime) discoveries and inventions.

Teleran, for instance, derives its name from the words, *television-radar air navigation*. A product of the Radio Corporation of America it is one of the most amazing and important electronic developments to come out of the war. RCA states that "teleran is intended for air navigation, traffic control, collision prevention, instrument landing, talk down landing, automatic landing, taxing control, and weather reception." And if that is not enough, here are fur-



RADAR SCANNING SCREEN—A "picture" of planes in the air within a radius of about 30 miles from the tower is given by two radar scopes. Radar now is being used as an auxiliary aid in handling air traffic and is being further developed.

ther details: "Teleran is based on a combination of ground radar, airborne transponders, and television transmission from ground to aircraft. . . . The television pictures transmitted to the aircraft are segregated according to altitude and are a composite of radar information superimposed on maps, traffic control, etc." In other words, teleran, through a ground radar unit at an airport, can "see" what is going on at ground level at the airport as well as in the air.

This is viewed on various radar scopes or screens at the ground station. A television "eye," in turn, is trained on the radar scopes and the data immediately transmitted by television to one or a number of planes in flight.

Shoran is another device also produced by RCA. It is not quite ready for display, but is described by RCA as "a radar system for accurate positioning of an aircraft or ship. It is applicable to the triangulation surveying of a line between two points, and for the location of off-shore mineral deposits.

Loran, a war-developed device in use by the United States Coast Guard, is described as "a system of long-range over-water navigation with reliable ranges of 700 nautical miles by day and 1,400 nautical miles by night." The loran system has an important limitation. While it is excellent for use over water, it is not effective over land spaces. Therefore, one of the most important developments of the CAA's Experimental Station at Indianapolis is the omni-directional radio range. For land use it is most effective when operated in the high frequency level.

Lanac, a development of the Hazeltine

Electronics Corporation, is another of the anti-collision devices. It is described as "a completely integrated all-weather flying system, including navigation, fixed obstacle avoidance, and anti-collision between aircraft (using lamina segregation at the atmosphere, so that planes are warned only of other planes at the same altitude), also traffic surveillance by ground observers and instrument approach."

Navar is the contribution of the International Telephone and Telegraph Corporation, through its subsidiary Federal Telecommunication Laboratories, Inc. They call navar "a wide-range radio radar airport traffic control system." It is specially interesting and significant to note that while navar is not yet available (it is not expected to be ready for complete demonstration until 1948), IT&T is already advertising both this and navaglobe in consumer magazines.

IT&T points out in its consumer advertising that "navaglobe can provide a way to direct the navigation of planes globally anywhere over the earth," and that combined with navar will extend the scope and the reliability of air navigation far beyond the present-day standards."

Air Network Of World Doubled

In his annual report to the International Air Transport Association, Director General Sir William P. Hildred stated at Cairo that during the 500 days since the end of hostilities, international airlines have expanded their networks to more than double the mileage they were before the war. The world's airlines now cover more than 300,000 miles, providing service by 35 different flags to over 200 countries, colonies, dependencies, and islands.

Air Commuters in BUSINESS SUITS

Those Grumman Widgeons shuttling between Long Island and Manhattan are proof of the air commuting pudding.

Long Island Airlines, Inc., demonstrates the way.

ALMOST since the day when the Dutch traded a barrel of rum and some trinkets for Manhattan Island, New Yorkers have been a race of commuters. Way back in colonial times, when the south end of the island became a bustling center of colonial business and shipping, the more well-to-do merchants moved to suburban homes "uptown," some even as far as what is now Fourteenth Street, and "commuted" to their countinghouses. They started a trend which even after 200 years still continues. Through all these years commuting New Yorkers have kept abreast of the latest modes of transportation.

Today, as the Air Age emerges from its swaddling clothes, some of the modern counterparts of these colonial businessmen, keeping pace with the times, have become the first group to be served by a truly commuter airline. Many of them with substantial homes on the Eastern end of Long Island—in the Hamptons, around Montauk, and on the smaller islands in Long Island Sound—have long desired speedy transportation between Manhattan and their homes. They finally got it last Summer when the Long Island Airlines, Inc., was formed and regularly scheduled service to New York began.

The train time on the Long Island Railroad between New York's Penn-

sylvania Station and the Eastern Long Island communities is too great to permit daily commuting and therefore has limited the amount of time they could spend at their Summer homes. For example, scheduled time to Montauk is over five hours, to Easthampton it is over four hours, and to Westhampton and Southampton it is more than three hours.

Speed and Comfort

Air line time to these communities, via the newly formed Long Island Airlines, is less than an hour, making daily round trips not only possible but a pleasure. Dad can catch the 4:30 flight out of New York and be met at the Southampton base by Mom and the youngsters at 5:15 in time to be home for dinner. And because the airline uses amphibians he doesn't have long trips to and from an airport at each end.

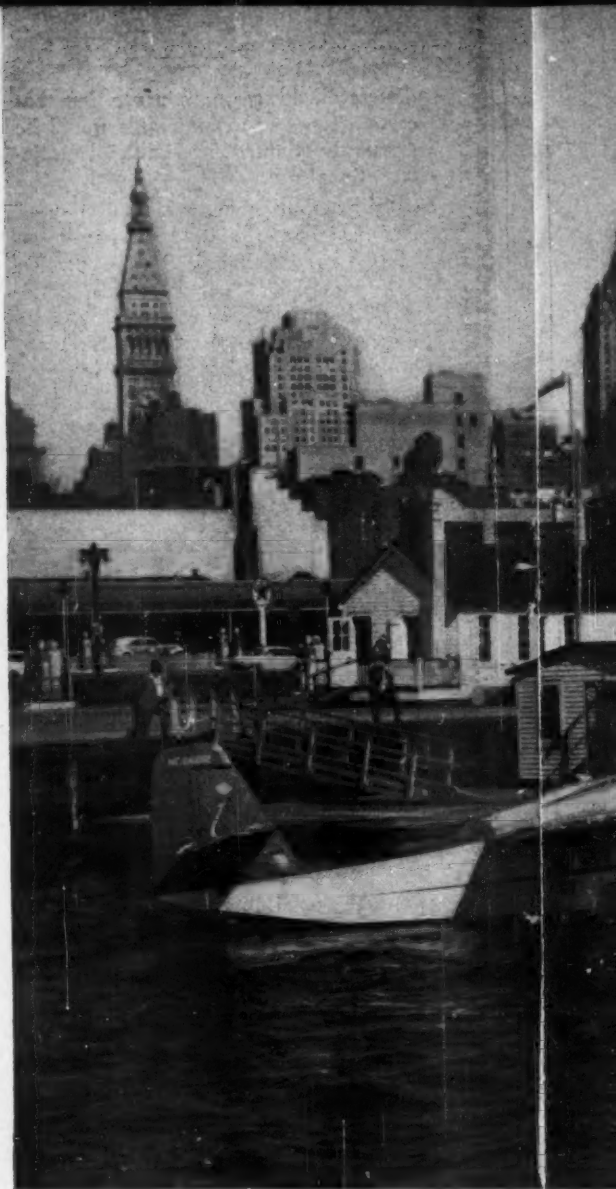
In operation now are four trim, red and black Grumman *Widgeons*, each powered by two 200 horsepower Ranger Sixes. The *Widgeons* can carry four passengers each trip. The line soon will add four *Mallards*—larger, 12-passenger amphibians now being manufactured by Grumman.

Much of the financial backing comes from Band Leader Guy Lombardo and

his family. Guy is vice president and Carmen and Lebert are stockholders. Royce Grimm, of Southampton, who is well-known in aviation circles, is president. Other officers are William B. Platt, Southampton attorney, treasurer; and Paul O'Brien, of New York City, secretary. John F. Hutchinson, formerly with Eastern Air Lines, is operations manager.

The New York terminal of the airline is the seaplane base at the foot of Twenty-third Street in the East River, a point handy to both the downtown financial section and the midtown business area. The base is but a few minutes by cab from either area.

Water landings are made at Southampton and Montauk on the Eastern ends. At Easthampton and Westhampton, where airports are located conveniently, the Long Island Airlines uses Easthampton Airport and Suffolk Airport. The Suffolk base serves both Westhampton and Riverhead, the county





MANHATTAN TERMINAL—Twenty-third Street dock in New York City used by Long Island Airlines.

seat, being but six minutes by auto from either town.

The *Widgeons* went into service in July. Beginning with 15 round trips daily, five each to Easthampton, Southampton and Westhampton, the schedule soon was raised to 19 daily round trips when four trips each way to Montauk were added. As at Southampton, a water landing is made at Montauk. Flights to Montauk were started somewhat later than to the other points because the ramp there was not ready when operations were begun.

Flights to and from New York are speeded by making each a non-stop trip. Flights from Southampton to New York take 45 minutes. Flights from Westhampton only 35 minutes. The Easthampton flight takes 55 minutes and the Montauk hop a few minutes more. The time will be cut considerably when the larger *Mallards* are put in service for their cruising speed is a good deal higher than the *Widgeon's* 130 mph.

Service between the four terminals and Manhattan was continued until October 15. During the Winter months the planes are operating out of Miami, with tentative service to Puerto Rico, Santo Domingo, Haiti, and the Virgin Islands.

Winter Plans

Grimm's plans were to leave one *Widgeon* behind during the Winter to take care of the smaller demand for Winter service on Long Island. When the regular commuter schedule is resumed next April 1, he plans to include service to Shelter Island, Orient Point, Bayshore and Patchogue, and possibly to Port Jefferson. By then the airline will have 736 seats available each day.

Since the routes flown by Long Island Airlines require a large number of water landings, ex-Navy pilots were select-

ed to fly the *Widgeons* and *Mallards*. Applicants were required to have at least, 1,000 hours of operation from water and all have many hundreds more hours of flying experience. The chief pilot, William Davenport, for example, has a total of approximately 5,000 logged hours. He flew 2,000 hours while in the Navy, most of them at the controls of a *Coronado*, a large four-engined seaplane used by the Naval Air Transport Service. Before that he taught flying in the civilian pilot training program and in Army primary schools. He learned to fly when a boy and has held a license since he was 16.

Commuters aren't the only persons making good use of the new service. Business people in New York City with clients who reside in the area served by Long Island Airlines found the line a big help. Because of the frequency of the flights, a businessman can leave his office in the city in the middle of the morning; transact his business at,

AT EASTHAMPTON — Below, a typical scene at the comfortable Easthampton Airport clubhouse where a Widgeon prepares for the take-off. Left, a couple of LIA pilots "chew the rag" after landing and unloading of plane.

for instance, Easthampton, and be back at his desk early that afternoon. He'd have to leave early in the morning and would be back in New York late in the evening if he tried to use any other means of transportation.

Speed isn't the only attraction the airline offers. The flight between New York and the Eastern end of Long Island is an extremely interesting one. Starting from his quiet, rural home after a leisurely breakfast, a commuter may drive with the family to one of the four bases already in operation. He kisses the missus and youngsters good-bye and as they stand watching he steps into the comfortable cabin of the sleek *Widgeon*.



If the base is Southampton, for example, the two Ranger engines increase the tempo of their steady purr and the amphibian rolls down the ramp and into the waters of the calm, peaceful, big South Bay. After a brief period of taxiing and a quick take-off run, the commuter is winging his way over the picturesque island. Familiar landmarks pass beneath him for from his vantage point he can see both the north and south shores of the island.

For the timid there is comfort in the sight of the many small bodies of water below and in the more vast stretches of Long Island Sound and the smooth Great South Bay. Then, too, there is



CHRISTENING CHORE—Rosemarie Lombardo does the honors with a bottle of champagne as Brothers Guy, the famous bandleader (right), and Carmen, the singer, look on with obvious pleasure. Rosemarie is quite a warbler herself.

hardly a moment during the entire trip when there is not an airport within gliding distance. Also below for most of the trip are the innumerable patches of large flat farmland which form such a feature of Long Island.

In the quiet, virtually vibrationless cabin of the *Widgeon*, the passenger sits comfortably and either watches the changing patterns of the island's shorelines or converses with fellow commuters.

Sailboats dot the many sheltered harbors, resting on quiet patches of water which range from deep blue through many shades of gray and green. Almost too quickly he is flying over the great estates on the Western end of the sound and approaching the graceful Bronx-Whitestone bridge, passing to the North of LaGuardia Airport.

Leaving LaGuardia Airport behind, the commuter's plane swings downstream along the East bank of the East

River while the tiers of Manhattan's spectacular skyscrapers pass in review offering an excellent view of New York's skyline from a seldom seen angle. The buildings glisten in the early morning sunlight.

Opposite the base the *Widgeon* banks gracefully toward the river and glides smoothly to a landing near the foot of Twenty-third Street.

Since flights arrive every 20 minutes, there are taxis standing by to carry the commuters to their offices. Within an hour from the time he rose from his breakfast table in Southampton, the commuter can be seated at his desk in New York. He's had a pleasant, relaxing trip with none of the hustle and bustle customarily associated with commuting and is ready to tackle a busy schedule comforted by the knowledge that he can cover the long distance back to his home just as quickly, as safely and as pleasantly.

AIR CARGO PERSONALITIES

GUY M. SPRINGER, JR.

*Director of Cargo Sales
Capital Airlines-PCA*

GUY M. SPRINGER, Jr., director of cargo sales for Capital Airlines-PCA, holds the view that ultimately his airline will have flown virtually every type of cargo in the world. And he is more than likely right. For Capital Airlines—and its expanding air freight organization—is determined to make its mark in the air cargo field.

Springer's background in transportation in general, and air cargo in particular, gives him an insight into the trends of sky-hauling that is paying off in ton-miles flown by Capital since he joined the organization in August of this year.

He was born into a freight-minded family in Fort Worth, Texas, 33 years ago. His father and two uncles were in the freight end of the railroad business. From boyhood in North Dakota, where his family moved soon after his birth, Springer watched the freight and transport businesses of the elder Springers, and obtained early training in the trade. He finished high school at Jamestown, North Dakota, and graduated from North Dakota College at Fargo. Since then, except for three years as salesman for the Northwestern Bell Telephone System, Springer has been affiliated with the vocation of his father—transportation.

When the Motor Carrier Act was first passed by Congress in 1935 the new Federal regulations and procedures upset motor carriers operations all over the country. Springer went to work with his father as alternate agent in the Associated Highway Carriers of South Dakota. The association was organized by the senior Springer to repre-



sent about 1,500 trucking companies before the Interstate Commerce Commission, intervening in their behalf in hearings for certificates, and tariff filing, and applications. After two years the initial ICC trucking and transport regulations and procedures were put into effect, so young Springer left his father's organization to become operations manager of a Sioux Falls trucking company, and at the same time as assistant to his uncle, R. D. Springer, traffic commissioner of the Sioux Falls Chamber of Commerce. Simultaneously, he was an agent for the Midwest Household Goods Mover Bureau in that city.

As assistant traffic commissioner, Springer and his uncle handled all transportation problems for the city and shippers and transportation firms located there. As part of the Chamber of Commerce service, the Springers intervened in behalf of transport companies and shippers before the ICC in cases involving highway, rail and air services, and rates.

During this time when the three Springers were engaged in different phases of the transport business, it was not unusual for the kinsmen to find them-

selves on opposite sides in cases before the ICC. In one case, Guy, Jr., was representing one operator; his father was representing the opposition; and his uncle, the traffic commissioner, was the intervener. Each member of the Springer family strove to win these cases from the other. Guy, Jr., admits, with evident pride in his father's business ability: "I never beat my Dad."

In May, 1941, Springer left South Dakota for Pueblo, Colorado, where he became traffic commissioner for the Chamber of Commerce handling the same type job his uncle had in Sioux Falls. A month later, he took his examination and received his certificate to practice before the Interstate Commerce Commission.

From 1942 until the time Springer became first associated with the air transport industry, he was district director of the Office of Defense Transportation with headquarters in Pueblo, having charge of all the wartime regulations of commercial vehicles in the southern half of Colorado.

At Braniff, under Springer's direction, a well-rounded cargo program has been developed. All types of cargo service including air mail, air express, international air express, and air freight were provided. The air cargo department plan was devised to serve not only the existing domestic routes of Braniff, but also to provide for expansion for possible new domestic and international routes.

In December, 1944, under Springer's supervision, Braniff Airways inaugurated a new international air express service between the United States and Mexico through four gateways: Dallas, Fort Worth, San Antonio, and Laredo in cooperation with Compania Mexicana de Aviacion, S.A. With this service, the first domestic carrier offered shippers all-risk cargo insurance, and published international air express rates for the first time, from points other than the points of embarkation. Another innovation of the new service

(Concluded on Page 51)

FREIGHT AIR SERVICE

FOREIGN AIR SHIPPING

Specializing In
Central—South America
and Far East

FAST, Inc., 80 Broad St., New York 4, N. Y.

ALL-AIR SERVICE

FROM NEW YORK TO CARIBBEAN, SOUTH AMERICA, FAR EAST, ATHENS, CAIRO, ROME

No Minimum Weight
Pick Up Included on Shipments Over 25 Lbs.
Low Rates. Fast Clearance.

TRANSPORTATION

Telephone Whitehall 4-5200



Looking aft along the Stratofreighter's 74½-foot upper deck

3.9 cents per ton-mile

No transport now flying can match the versatility of the Boeing Stratofreighter. None can approach its low direct operating cost of 3.9 cents per ton-mile. With its bold design advances, this giant new work-horse of aviation is destined to open important avenues of profit for the airline operator and give air cargo its greatest impetus in years.

Big, fast, powerful, the double-decked Stratofreighter will have twice the cargo space of a railroad boxcar, a payload capacity of more than 20 tons, a 4200-mile operating range, cruising

speed of 300 to 350 miles an hour.

All four altitude-conditioned cargo holds are loaded simultaneously, three from truck-bed level, the fourth by a 5000-pound overhead lift. Each hold is individually heated or refrigerated, permitting, for the first time, air shipment of virtually every kind of staple or perishable merchandise.

The Stratofreighter is a twin to the famous Boeing Stratocruiser—first true super-transport—which will go into service in 1947. Boeing Airplane Company, Seattle, Wash.; Wichita, Kans.

Heavy vehicles enter military version of Stratofreighter under their own power.



BOEING
StratoFREIGHTER

The same skill in research, design, engineering and manufacture that produced the B-17 Flying Fortress and B-29 Superfortress, ocean-spanning Clippers,

Stratoliners and Stratocruisers distinguishes the Stratofreighter. Built by Boeing, it's built to lead.

That Cargoliner 230 . . .

THOSE new four-engined United Air Lines Cargoliner — 230s they're called, because they cruise at a speed topping 230 miles an hour—are equipped with everything from soup to nuts. Air freight is a serious business, and the cargo men over at United are taking it seriously.

Airborne cargo is on the upgrade. What's more, the new five-cent rate for all domestic air mail probably will find the loads increasing. That's how it always has worked: knock down the price for a chap, and he'll buy more of it.

The Cargoliner is completely windowless these days—that is, with the exception of the pilots' compartment. The interior of the plane is lined with white plastic laminated sheet Plyon, with aluminum fittings and plenty of lights.

Installation of the Plyon, attached to the plane's frame, provides spaces $1\frac{1}{2}$ inches wide and 17 inches long between the Plyon lining and the spun Fiberglas insulation against the outer skin. These spaces are called hot panels; they create a duct for the even distribution of hot or cold air throughout the entire cargo area. The air is circulated through a passage in the ceiling, then shunted to the interior of the cargo compartment as well as through the hot panels, with 700 cubic feet per minute passing through each section. The result is that there is no difference between the center of the cargo compartment and the walls of the plane.

There's a new dry ice-methanol system, too. United believes this to be the first time the system has been used in an airfreighter. It provides complete refrigeration of the entire interior. Located in the forward belly pit, the refrigeration equipment is tied in with the plane's ventilation system and electronic thermostatic control. This provides even, low temperatures in flight or on the ground for perishable cargoes.

It is also possible to refrigerate only a portion of the plane. The aft section can be closed off with a thermo-sealed curtain equipped with dry ice pockets providing refrigeration for more than 300 cubic feet of space and a 1,000-pound capacity.

Flexible pit gates speed the stowing of cargo in each of the 10 pits. When a pit has been filled, all the cargo handler need do is close the gates and secure the spring-loaded pins. Tie-down procedures are used only when the pits



The portable electric winch (above) on the floor of the UAL Cargoliner operating a cable to a hoist boom . . . Interior view (below left) of the Cargoliner, showing cargo pits on both sides of the main corridor. Note the cargo handler standing in front of the refrigerated section of the plane . . . (below right) Inside one of the cargo pits. Hinged shelf can be swung out of the way, if necessary. The stanchion at the right has been moved to one side to give the pit a wide-open front.



are partially full. The pits, each of which measures about 80 x 40 x 85 inches, are equipped with hinged shelves which can be swung out of the way or used to stow small shipments. When more floor space is needed for long or odd-size articles, stanchions forming the side of the pits can be folded back, and —presto!—more room!

When the plane is on the ground at



stations where outside auxiliary power is not available, cargo handlers need not work at a disadvantage. An auxiliary gasoline-driven power unit, installed in the forward section of the cargo compartment, permits the operation of a movable electric winch and electricity for loading lights.

The winch, coupled with a four-foot

(Concluded on Page 51)



ALASKA Airlines has put its first DC-4 in operation, with a second one expected within a month. The planes will be used on regular routes in Alaska and on non-scheduled routes between the Territory and the United States.

Bell Aircraft Corporation will exercise its option to purchase the multi-million-dollar plant it occupies at Niagara Falls from the War Assets Administration.

Phalanx Air Freight, which has been appointed agent to consolidate less-than-plane load shipments for the Flying Tiger Line, has announced a new cargo service linking the San Francisco Bay area and Northern California with principal cities of the United States. Service to the Far East also will be provided.

The **Pilotless Plane Division of the Fairchild Engine and Airplane Corporation** will move from Jamaica, New York, to its new home in Farmingdale, Long Island, New York.

Scandinavian Airlines System, operating from the United States to Denmark, Norway, Sweden, and Scotland, has increased its flight schedule to three weekly. Departures are on Tuesday, Thursday, and Saturday, with arrivals from Scandinavia on the same day.

An "airgram" for foreign air mail is being prepared for introduction soon, according to **Gael Sullivan**, Second Assistant Postmaster General. It will be a version of the familiar wartime V-Mail except that it will not be photographed and will be available for general public use.

Direct air service from the Northwest states to Cleveland, Pittsburgh, and Washington, D. C., is sought by **Northwest Airlines** in its application before the CAB.

Station KOCs, Ontario, California, will present a half-hour radio program sponsored by **Pacific Overseas Airlines**. It will occupy a Sunday morning spot for an initial trial period of 13 weeks.

HELICOPTER GRADS



Flanked by William A. M. Burden, Assistant Secretary of Commerce for Air (left), and Lawrence D. Bell, president of the Bell Aircraft Corporation (right), members of the first graduating class of the first flight training school are shown at exercises held at the Bell plant at Niagara Falls. Left to right are Burden, William L. Furniss, Fred H. Bowen, Stephen W. O'Donnell, Harlan S. Hosler, Sten T. Lundberg, and Bell. O'Donnell, who is aide to Gael Sullivan, Second Assistant Postmaster General in charge of air mail, participated in the course to obtain technical knowledge in connection with the Post Office Department's plans to inaugurate air mail shuttle service. The other graduates received commercial licenses to pilot these rotary wing aircraft.

The **Douglas Aircraft Company** is working on a supersonic rocket plane capable of 1,500 miles an hour. An offer of \$50,000 for a test pilot to make the first flight is said to be pending.

KIM has purchased a dozen Convair 240s at a total cost of approximately \$3,500,000 for use over its European routes. Deliveries are expected to begin in July of next year.

Thomas E. Lyons, executive secretary of the Foreign Trade Zones Board, United States Department of Commerce, believes that the establishment of foreign trade zones at inland airports is a distinct possibility in the near future.

Coast-to-coast air express service is planned by **Trans-Canada Air Lines** for next Spring. Montreal, Toronto, Winnipeg, and Vancouver would be major stops.

South America, Alaska, Canada, South Africa, and other undeveloped areas, urgently need a "truck horse of the sky." What are United States aircraft manufacturers doing to satisfy this demand? The British appear to have the inside track in this market, even to the point of selling *Dragon Rapides* designed 15 years ago. Is America going to be too slow with too little?

According to **Postmaster General Oscar M. L. Nicolini** of Argentina, air mail postage between that country, the United States, and Canada, will be reduced in the near future to a point even below the new United States-to-Argentina rate of 10 cents.

Application for five helicopter routes has been made to the Civil Aeronautics Board by **All American Aviation**. Three routes are sought in the Philadelphia-Camden area and two in the Pittsburgh area, with authority to carry passengers, mail, and property.

K · N · I · L · M

TRANS-PACIFIC FLIGHTS WITH FOUR-ENGINE AIRCRAFT

BETWEEN

LOS ANGELES (CAL) AND BATAVIA (JAVA)

Now Operating Contract Service for the Netherlands East Indies Government. Occasional Space Available. Expect soon to operate on regular scheduled flights.

ROYAL NETHERLANDS INDIES AIRWAYS

521 Fifth Avenue, New York 17
VA-6-1765

6511 Hollywood Blvd., Los Angeles
HO-5818



Aaxico ON THE GO



OVER MANHATTAN—Making a perfect picture over Manhattan's famed Central Park is this Aaxico DC-3 plane.

NO one was more surprised than the officers of Aaxico when, following the filing of their report to the Civil Aeronautics Board, they learned that their planes had flown more hours, more passenger-miles, and more passengers than any other two non-scheduled airline competitors combined. And the airline showed profit, too—to the tune of \$57,000.

At the moment Aaxico, which is the more handy contraction of American Air Export-Import Company, is operating seven Douglas DC-3s with two more in the process of modification. Up to this writing the airline had topped 18,000,000 passenger-miles without mishap, transported some 20,000 passengers, with plane utilization 10.3 hours a day, seven days a week, since December of last year.

The organization of Aaxico goes back to November 17, 1945, when Charles A. and Thomas J. Carroll, Howard J. Korth, and Glen H. McNew, all partners, wrote out a check and came up with a surplus C-47 meant for cargo operations.

Air cargo was on Aaxico's mind in the beginning, and the first deal was to fly a planeload of apples to Colombia, with the return load of orchids going to New York. The apple cargo was okay, but just before the take-off word arrived from Colombia that a blight had ruined the entire orchid crop. Carroll, McKnew, and Korth took the bad news philosophically, sat down, and started eating apples at the Miami airport.

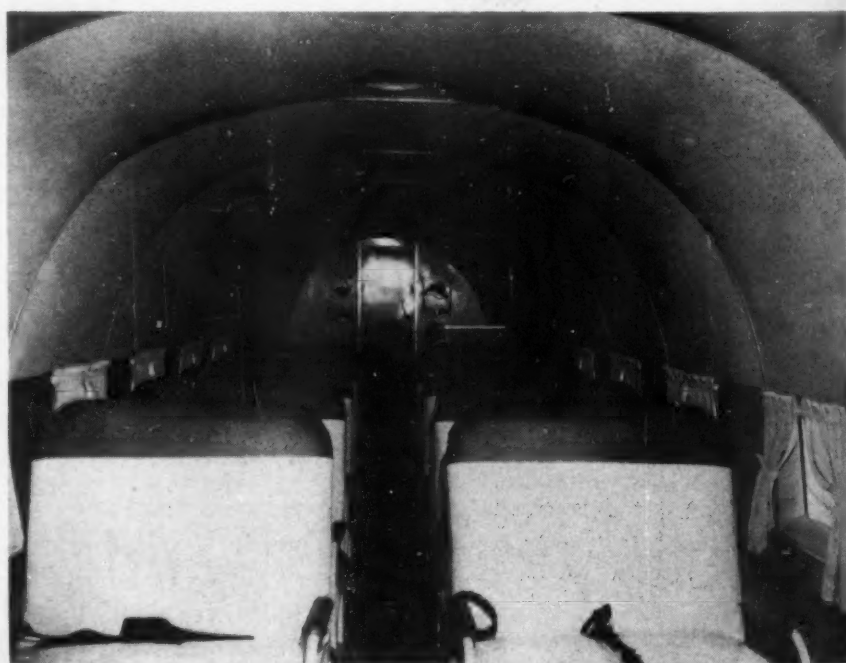
The next move was a happier one.

Korth arranged with a Fort Myers, Florida, gladioli grower to transport 5,500 pounds of flowers to Chicago to catch the Christmas trade. That flight took place just five days before Santa Claus began his mad dash through the skies. Plenty of time was left for delivery and sales.

But then the Miami Winter trade began to beckon with a long finger. Miami Beach hotels and tourist agencies were contacted, a ready market was dis-

covered, and pretty soon Aaxico found itself plying between New York and the Winter playground with full loads of passengers. The airline was among the first charter outfits on this run. So great was the passenger demand that Aaxico temporarily abandoned its cargo aspirations. Since that time passenger flights have been extended to include Atlantic City, San Juan, and Havana.

New York-San Juan and New York-Havana all-expense air cruises are



AAXICO PLANE INTERIOR—The new high density double seats, which increase passenger capacity by half, are the invention of Charles A. Carroll, president of the airline.



Charles A. Carroll Thomas J. Carroll

among Aaxico's pet ideas. Recently inaugurated, these package tours include air transportation, hotel accommodations, sightseeing, and entertainment. The cost is less than \$200.

Aaxico employs a score of air crews (pilot, copilot, and hostess). An airline transport rating is required of each pilot. The GI angle is not missing either, as 70 percent of the airline personnel are war veterans. George Rodieck has two million miles under his belt, with 14 million-milers also listed, including officers of the company. And as for the hostesses—quite a number are Powers and Conover gals—they must be quite up on their Spanish lingo.

Two sets of brothers comprise two-thirds of Aaxico officialdom—and, unlike the Martins and the Coys, the Carrolls and the Korths get along quite

famously together. In fact, they're related by marriage: Chuck Carroll and Howard Korth married sisters.

Charles A. Carroll, founder and president of the company, is only 28. A native of Bay City, Michigan—his father was president of the National Bank there—Chuck studied aeronautical engineering at Notre Dame. (Incidentally, the alma mater spirit prevails at Aaxico where 15 Notre Dame graduates are employed.) He learned to fly before graduating from the university, and in 1940-41 young Carroll turned up as part owner and manager of the Detroit School of Aviation, at Joy Airport, Detroit. It was there that he conducted a civilian pilot training program for the Government.

Eventually Chuck climbed into a pilot's seat for Pan American Airways on the South American run. But the germ of the Aaxico idea was deeply imbedded in him, and just about a year ago he turned in his resignation to Pan Am. The business was established shortly thereafter, as well as a laboratory. The Aaxico president's agile brain has developed a high density seat, an angle of attack indicator, and auto trim units.

Vice president and general manager is Howard J. Korth, of Saginaw, Michigan, who is 26 years old. The son of a construction engineer, he is another



Howard J. Korth J. S. Kail

Notre Dame alumnus. He was honorably discharged from the Navy after serving in the Pacific. Korth had no visions of the air transport business before entering into it. Actually he was on his way from Michigan to Texas to take over an engineering job when he stopped off for a visit with his brother-in-law, Charles Carroll. It is not difficult to imagine what transpired during that short visit: Howard Korth never got to Texas.

His brother, William J., elder by five years, seems to have strayed from the beaten track by graduating from Michigan State University. His first job was with General Motors in its accounting department. He left to take over a position with Fisher Body where, in nine years, he rose to the post of head statis-

(Concluded on Page 51)



IMMEDIATE Air Cargo Space and Luxury Passenger Accommodations Available to the Orient

★

Twice Weekly Flights on DC-4 Skymasters

Four Engine Transport Planes to

**MANILA • HONG KONG • SHANGHAI • BANGKOK • BOMBAY • CALCUTTA
from Oakland Airport, San Francisco**

Direct air connections from New York, Philadelphia, Chicago, St. Louis

★

Authorized Booking Agents:

FREIGHT CARGO AGENCY, INC.

60 BEAVER ST., NEW YORK 5, N. Y.

★

Pacific Coast Booking Agents: **BERRY AND McCARTHY**

260 California St., San Francisco

*Phones: WHitehall 3-0637-8
Direct Western Union Wire*

Telephone: EXbrook 8800

AIRDOM



(Trade Mark)

THE WORLD'S WINGS

LUCIEN ZACHAROFF, who has been turning out books for some time, has come out with a volume which probably will touch off a considerable measure of bitter controversy. For in *The World's Wings* (Duell, Sloan and Pearce, \$3.00) he comes into head-on collision with what he terms postwar "air imperialism"; and after pursuing his thesis for several hundred pages, Zacharoff delivers a roundhouse at aviation journalists.

Forewarned is forearmed. The chapters of this new book will, no doubt, stir a quantity of angry retorts from certain airlines, Government officials, and chroniclers of the industry, and we may see a lively wrangle over the merits of Zacharoff's charges for some time to come.

While *The World's Wings* delves at length into such domestic issues as overseas routes, chosen instrument, sea-air and rail-air integration, and monopoly, it would be nearer correct to state that the author has attacked his subject from the social point of view: the people versus American aviation. The author admits that he "could not but acquire my own views and sympathies," and denies that one can lay claim to having "a sense of social responsibility when one assumes a neutral or indifferent stand on vital public issues." He charges many aviation writers with refraining "from taking a stand" when it was necessary to do so. (Do we hear the crackle and roar of lightning and thunder?)

Zacharoff paints a deliberately broad picture, and the canvas on which he lets

his brush travel cannot be too broad for his subject. The book is well-documented, but it's the author's conclusions which are of a highly controversial nature. One clue is contained near the middle of his work:

"... One of the purposes of this book is to convey the prevailing attitudes of those who may soon be responsible for whatever global air transport policy is adopted by the United States Government—a policy which will have much to do with the economic and political stabilization of the entire world, with the promotion or elimination of the economic warfare so very apt to evolve into armed conflict."

It is the author's contention that "America's domestic air carriers are not truly domestic," existing only "within the framework" and operating "against the foreground of worldwide aviation." He calls them "part of a global scheme that embraces every nation, every continent," and goes on to say that "their interrelationship with foreign carriers becomes highly accentuated when they launch overseas operations."

Zacharoff makes no bones about the Anglo-American "growing struggle for the control of world airways and world aircraft markets," even though some sections of opinion have tried to play this down on the rather flimsy grounds of political cooperation. This reviewer does not believe he will have a great deal of opposition on this point.

"Even while the two English-speaking allies were standing shoulder-to-shoulder against a common foe, their great business battle bitterly continued apace. Builder of history's greatest empire, for generations the undisputed

leader in world commerce because she was the mistress of the seas, hard-hitting, accustomed to success, Great Britain felt that she had no choice but to contest the issue with America. Global arteries of commerce, not alone shipping lanes but of whatever sort, were her lifelines; only by dominating them could the tight little island keep body and soul together in comfortable style and hold firmly welded that far-flung Commonwealth of Nations on which the sun never sets."

Aside from the explosive material contained in *The World's Wings*—which, in the final analysis, can be conclusively decided by open democratic debate between both sides—Zacharoff's presentation of his personal arguments commands respect both for its compactness and literary lucidity.

It is the suggestion of this reviewer that an Aviation Writers Association luncheon would make an exceptionally good arena for anyone wishing to slug it out with the author of *The World's Wings* on one or several of the sizzling issues contained in the book—that is, if Lucien Zacharoff is willing to brave the storm.

N.Y. Port Authority Turns Down Newark Airport Offer

Unanimous rejection of the counterproposal of the Commission of the City of Newark on the sale of Newark Airport and seaport to the Port of New York Authority has been made by the latter body.

The Port Authority, following a survey, had offered Newark \$5,000,000, payable in five annual instalments, for the transfer of the existing marine and air terminal properties of the city, in addition to an annual contribution of \$100,000 in lieu of taxes. It also offered an alternate payment plan of flat annual payments of \$306,750 for 30 years.

In its refusal of the Port Authority's offer, the Newark City Commission proposed a payment of \$10,400,000 for the airport alone, and would not consider the possible purchase of additional land outside the 1,300 acres set aside for airport purposes. Also, the purchase of the seaport was to be considered separately.

WHITE STAR AIR TERMINAL CORPORATION

Teterboro, New Jersey

New York Terminal for Non-Scheduled Carriers

Cargo and passenger loading facilities and complete ground servicing (including warehousing) available on a reasonable basis.

Operating 24 hours daily.

Approximately one-half hour trucking time from Midtown Manhattan and Newark

Telephone { Day: Hasbrouck Heights 8-1733
Night: Hasbrouck Heights 8-0223R

On the NON-SCHEDULED Front

The Air Freight Case . . . the show-cause order and some newsy odds and ends

THE chips are down, and the long-awaited Air Freight Case has been scheduled for November 18 in the Hotel Texas, Fort Worth, Texas, and continued on November 25 in the Chalfonte-Haddon Hall Hotel, Atlantic City, New Jersey. Here is where the fur flies, with the future course of a great new industry at stake.

A week before the Fort Worth session got under way, the Independent Airfreight Association, through H. Struve Hensel, its counsel, aired the position of the organization's five members at a press luncheon in New York. The position taken by the IAA is that all air freight carriers—scheduled and non-scheduled—should be issued air freight certificates and regulated alike.

Fourteen airlines, who have applied for common carrier certificates and for permission to operate over certain specified routes, will be affected by the hearings. What the Civil Aeronautics Board will do—deny or grant certificates with or without limitations—is largely a question. An economic regulatory pattern governing the operation of air freight will undoubtedly be one of the principal results of the hearings.

Intervenors in the proceedings in which economic regulations are to be drawn up include the IAA (Slick Airways, Willis Air Service, National Skyway Freight Corporation, Flamingo Air Service, and U. S. Airlines); the Department of Justice; a score of civic organizations; the Institute of Air Transportation; Lyon Van and Storage Company, Los Angeles; Globe Air Freight Line; Beekins Van Company, Salt Lake City; and a dozen certificate airlines.

Besides the issuance of separate air freight certificates, the IAA is plumping for "freedom of competition, no air mail or other Government subsidy or assistance of any kind," and "flexibility of Government regulation." Said Hensel:

"The industry, being clearly a new and different industry, should be covered by special air freight certificates and should be permitted to develop according to the specific principles found to be controlling in respect of that industry alone. The concepts previously established for the air carriage of passengers and mail should not be applied.

The air freight regulatory pattern should be kept as flexible as possible until sufficient experience is accumulated to make certain which of the practices and procedures will be most suitable."

He pointed out that no one could foresee clearly the future of air freight, and that "any set of regulations which can be now devised most likely would have to be changed in the near future." Flexibility could be brought about through "periodic investigation," said Hensel, with the assurance given to air freight operators that "if the field is diligently and capably worked by the



CAB Examiners William Cusick (left)
and Vernon Radcliffe

franchise holder, the franchise will be continued."

Only one of the 14 applicants who will be passed upon at the Air Freight Case hearings is certificated—Capital Airlines-PCA—which is asking a common carrier certificate to carry freight beyond its present passenger routes. The others are: Air News, Inc. (Express Publishing Company), Air Travel, Inc., Air-Borne Cargo Lines, Inc., Air Transport Corporation, American Air Express Corporation, California Eastern Airways, Inc., Flamingo Air Service, Inc., Flying Tiger Line, Lone Star Air Cargo, Inc., Standard Air Lines, Inc., Slick Airways, Inc., U. S. Airlines, Inc., and Willis Air Service, Inc.

Slick is expected to underline to the CAB the fact that, as the country's largest air cargo carrier, it was flying in October at the rate of about 25,000,

000 ton-miles annually, as compared with the 20,000,000 ton-miles annually flown by the nation's scheduled airlines combined. During its first year as a certificated operator, Slick would use 30 *Commandos* to fly 87,257,800 ton-miles of freight; in its second year, 145,429,700 ton-miles with a 50-ship fleet; and 403,781,200 ton-miles in its fourth year with a type of cargo plane still unspecified.

The Flying Tigers will tell the Board that, with 16 C-47s and four C-54s, they expect next year to haul 40,032,000 ton-miles of freight. U. S. Airlines, which now operates a dozen C-47s, has definite plans of flying 30 of these aircraft or 25 Martin 202s or 28 DC-4s, and an estimate of 20,000,000 plane-miles annually has been made by the company as a basis for freight-haulage statistics. Willis predicated its own estimates for scheduled service on a 12-ship fleet—all DC-4s—flying 38,282,878 revenue ton-miles.

Earlier last month the CAB had ordered five non-scheduled airlines—Trans-Luxury Airlines, American Air Export and Import Company, Catibe Airways, Texas Airlines, and Trans-Caribbean Air Cargo Lines—to show cause why they should not cease operations for allegedly operating illegally as scheduled carriers. Should these airlines be found guilty of operating in violation of the 1938 Civil Aeronautics Act, they would be put out of business unless they could obtain certification as scheduled carriers.

Shortly after the show-cause order was issued, Charles A. Carroll, president of Aaxico (American Air Export and Import Company), stated that he was "glad we will soon be given the

Up, Up, Up

Air freight shipments for the months of September and October, reported by four of the five members of the Independent Airfreight Association, totaled 5,051,127 ton-miles. This two-month volume compares with 4,000,000 ton-miles flown in July and August by all five members of the IAA—an increase of more than 26 per cent, even with the figures from one company not yet available.

opportunity to express our views." He said that several months before he had sought a CAB hearing to clarify the Board's interpretation concerning the legalistic aspects of non-scheduled operations.

"We went on record as stating we were reluctant to continue present operations until such clarification was established," Carroll said. "Believing in good faith that we were functioning within the allowable confines of the Act, we had built up a sizable, profitable, efficient, and well-managed organization. . . . By their show-cause order, directed to us, the CAB has extended the invitation for a hearing for which we have long been waiting."

Aside from governmental entanglements there were other interesting developments in the air cargo picture, at least from the uncertificated airlines' side of the fence. Trans-Caribbean announced a reduction in rates and extension of its service to Chicago, Detroit, Pittsburgh, and Cleveland. Under the

new rate structure, transportation charges between New York and San Juan, Puerto Rico are 20 cents per pound for shipments over 20 pounds. All traffic originating in any of the cities served by Trans-Caribbean now travel on through air waybills. The line has a common carrier bond which permits it to carry in bond shipments.

California Eastern Airways has acquired the assets and operations of Mercury Transport Corporation, New York, and Columbia Air Cargo, Portland, Oregon. CEA is no small fry in air cargo haulage. Last available figures are for August during which month the airline transported 468,247 ton-miles of air freight.

From Philadelphia comes the news that Colonel Fred P. Dollenberg, president of Winged Cargo, Inc., has established a passenger airline known as Winged America, Inc. The Nassau Development Board in the Bahama Islands is sponsoring Winged America as the only direct passenger service operating between Philadelphia and Nassau.

Air France Freight Set-up Is Headed by Sainderichin

The appointment of Constantin N. Sainderichin as air freight manager of Air France has been made public by Henri J. Lesieur, general manager for the airline in North America.



C. N. Sainderichin

Sainderichin was an officer in the French Army, a war prisoner and escaped. He was later wounded, and eventually turned up in New York as part of a French military mission.

Air France now serves 51 countries on five continents. According to Lesieur, the opening of the transatlantic air freight link will prove a valuable stimulus to the import and export trade. Included in the air freight plans of the French airline is the flying of perishables. Such commodities will be carried in special compartments.

Contract with China Signed by Chennault

A contract authorizing Major General Claire L. Chennault, former Flying Tiger chief, and Whiting W. Willauer, former head of the Far Eastern Division of Foreign Economics Division, to operate a relief airline in China, has been signed by Chennault and Ho Pac-shu, director general of the Chinese Relief and Rehabilitation Administration.

The air service will be called CNRRA Air Transport and will operate 12 planes. Chennault is expected to make Canton his main base.

Foreign Freight Forwarders Paid Brokerage by Fast, Inc.

The Fast International Division of Fast, Inc., announces that it will pay brokerage of five percent on the air freight rate per pound to recognized foreign freight forwarders.

An air freight schedule has been issued by Fast, stressing all-air shipments, rather than rail-air shipments. Daily service from New York is offered, with "the bottlenecks and delays in Miami on South American shipments eliminated." It is claimed by the new outfit that delivery to any point in South America listed on its all-air transportation tariff will be made within five or six days after departure from New York. Rates include free pick-up in New York on shipments of 25 pounds and over. There is a minimum charge of 50 cents on packages under 25 pounds.

Ex-ATC Chief George Heads Peruvian Airline

General Harold L. George, pioneer military airman, has resigned from the United States Army and the United Nations Military Staff Committee to become president and chairman of the board of Peruvian International Airways. This airline was established by the Peruvian Government to operate a passenger-cargo service between Lima and Montreal, via Panama, Havana, and New York.

General George was commanding general of the history-making Air Transport Command during the greater part of the war. His headquarters will be made in Lima.

WAL Opens New Offices

Western Air Lines is opening new ticket offices and remodeling old ones in 14 cities along its 6,000-mile system. Costs range from \$1,000 to \$100,000 each.

2 Airports to be Scene Of Tests Consolidating Air Terminal Services

Consolidation of airline terminal services on an experimental basis will go into effect at Willow Run Airport, Detroit, and the Greater Cincinnati Airport, in Kenton County, Kentucky. This news was made known by the board of directors of the Airlines Terminal Corporation, recently authorized by the Air Transport Association.

The program, involving the scheduled airlines of the United States, will be tried at these two airports in the first of a series of test cases at air terminals. The operations will include services both on the airports and in the terminal buildings.

Present plans call for the new organization—a cooperative unit—to handle the services previously performed by individual airline personnel. By concentrating adequate forces to handle the busiest traffic periods, it is aimed at avoiding duplication of effort. Consolidation will bring substantial economies while increasing efficiency.

Ramp services to be covered by the new corporation will include guiding planes to their proper berths, fueling, cleaning, loading and unloading of baggage and cargo. Inside the terminal buildings, the consolidated services may include ticketing passengers and baggage checking, information and other passenger and cargo details. Because of differing local conditions and commitments, the extent and methods of the Airlines Terminal Corporation services are expected to vary considerably from airport to airport.

The directors in announcing plans for the first installations of the new program, emphasized that all personnel now engaged by the airlines to perform these services, will be transferred if they so desire to the terminal corporation rolls.

Roy Callahan, until recently general manager of the New York City Airport Authority and Assistant Commissioner of Marine and Aviation for the City of New York, is now general manager of the corporation. The original capitalization of the corporation, with stock held by the airlines themselves, was set at \$500,000. There are 20 stockholders, comprising the larger scheduled airlines.

Vice Admiral Emory S. Land, president of the ATA, is president and director of the new organization. Other directors are C. R. Smith, American Airlines System; T. E. Braniff, Braniff International Airways; C. Bedell Monro, Capital Airlines-PCA; C. E. Woolman, Delta Air Lines; Paul H. Brattain, Eastern Air Lines; A. M. Jens, Jr., Trans World Airline; Ray W. Ireland, United Air Lines; and Robert Ramspeck, ATA executive vice president.

Organization of the corporation was described by Ramspeck as "an experimental first step in something that may well become a bigger business enterprise than any single airline in the United States." If it should produce the anticipated operating economies, he said, "the plan naturally would be expected to include every major air terminal in the country."

The formation of the Airlines Terminal Corporation followed an extensive study in five selected areas by Joseph D. McGoldrick, former New York City comptroller. His report predicted that in these locations alone annual savings of as high as \$1,000,000 might be expected from consolidation of services. Increased speed and efficiency in handling rapidly mounting volumes of passenger and cargo traffic is the major objective of the program.

Big Air Cargo Terminal At Teterboro Sparked by Willis

The newest development in the program to build Teterboro Airport, Teterboro, New Jersey, into the "air cargo hub of the New York area" is the decision by Willis Air Service to erect a huge air freight terminal building with refrigeration facilities.

Charles F. Willis, Jr., president of the air freight line, indicated to AIR TRANSPORTATION that construction probably would begin about the first of next year. At the present time, he said, a "modest terminal" at Teterboro, used by Willis and the Flying Tiger Line, and occasionally by Flamingo Air Service and Lone Star Air Cargo Lines, is handling between 70,000 and 100,000

pounds of air freight a day. Slick Airways is expected to begin using the terminal by Christmas.

The building of the new terminal is actually a cooperative project entered into by the five members of the Independent Airfreight Association: Willis, Slick, Flying Tigers, Flamingo, and U. S. Airlines. In the Teterboro case, Willis will act as landlord to the other companies using the facilities. When a duplicate air freight terminal will be built on the West Coast, it will be the Flying Tigers who will take on the mantle of landlord; in the Southwest it will be Slick; and in the South, Flamingo and U. S.

Recently Willis and a number of other air freight experts outlined the Teterboro

plan before a committee of the Aviation Section, New York Board of Trade, stressing the importance of such a terminal in the metropolitan area. It was pointed out that the approaches to Teterboro are unusually clear, and that the field itself is strategically located at a highway junction. Runways are being lengthened from 3,500 to 4,500 feet, to accommodate four-engined equipment. An engineering survey is now in process by the Section.

New Blimp Mark

The Navy airship, XMI has broken the Russian record for nonstop, nonrefueled flight, with its own new mark of 170.3 hours. The XMI is the largest blimp in the Navy.

1st MONTH OF 5c AIR MAIL PAYS OFF

Air Mail Field Post Office	Pounds Dispatched 1946		Pounds Increase	Per cent Increase
	September	October		
Atlanta, Ga.	105,964	139,716	33,752	31.85
Billings, Mont.	14,204	19,308	5,104	35.93
Boston, Mass.	75,012	100,389	25,377	33.83
Buffalo, N. Y.	39,612	51,532	11,920	30.09
Cheyenne, Wyo.	12,222	17,448	5,226	42.75
Chicago, Ill.	518,236	744,642	226,406	43.68
Cleveland, Ohio	71,316	102,900	31,584	44.29
Dallas, Texas	140,363	188,678	48,315	34.42
Denver, Colo.	99,677	137,405	37,728	37.85
Detroit, Mich.	86,345	104,912	18,567	21.50
Fort Worth, Texas ..	91,985	121,792	29,807	32.40
Indianapolis, Ind. ...	26,836	31,461	4,625	17.23
Jacksonville, Fla.	53,439	70,165	16,726	31.30
Kansas City, Mo.	111,411	123,916	12,505	11.22
Los Angeles, Calif. ..	376,112	560,599	184,487	49.05
Memphis, Tenn.	46,464	65,676	19,211	41.34
Minneapolis, Minn. ...	76,075	101,273	25,198	33.12
Nashville, Tenn.	40,966	71,683	30,717	74.98
Newark, N. J.	113,916	178,452	64,536	56.65
New Orleans, La.	62,364	88,469	26,095	41.84
New York, N. Y.	487,128	690,943	203,815	41.84
Omaha, Nebr.	52,904	68,423	15,519	29.33
Philadelphia, Pa.	54,875	70,761	15,886	28.95
Pittsburgh, Pa.	88,137	103,500	15,363	17.43
Salt Lake City, Utah ..	51,770	66,841	15,071	29.11
San Francisco, Calif..	273,580	499,903	226,323	82.72
Seattle, Wash.	100,403	126,154	25,751	25.64
Washington, D. C. ..	253,793	312,302	58,509	23.05
Totals	3,525,109	4,959,232	1,434,123	40.68*

* Average.



Within easy reach of
IMPORTANT AIR LINES
IN 21 AMERICAN CITIES

25 SHERATON HOTELS

await the opportunity to extend to you the benefits of traditional hospitality in a strictly modern setting.

THERE ARE SHERATON HOTELS IN

BOSTON	ANNAPOLIS	PITTSFIELD
PROVIDENCE	WASHINGTON	Massachusetts
NEW BRITAIN	AUGUSTA	RANGELEY
NEW YORK	Georgia	Maine
NEWARK	DAYTONA BEACH	ROCHESTER
PHILADELPHIA	WORCESTER	BUFFALO
PITTSBURGH	SPRINGFIELD	DETROIT
BALTIMORE	Massachusetts	

AIR FORWARDING

European News

CONSULT A SPECIALIST

BRITISH & FOREIGN MARITIME AGENCIES LTD.

Over 30 Years' Experience

GENERAL FORWARDING — INSURANCE — CUSTOMS CLEARANCE, ETC.

Agents for all well known European Airlines—including

BRITISH OVERSEAS AIRWAYS CORPORATION and
 K. L. M. Oldest Airline in the World

LONDON, E. C. 3 37/8, Fenchurch Street

Telephone: Mansion House 6585
 (12 Lines)

Telegrams: Mizenmost London
 (Overseas)

LEGAL NOTES

on Air Transportation

By GEORGE BOOCHEVER

Chairman of the Legal Committee and
General Counsel to the Aviation Sec-
tion, New York Board of Trade

THE liability for damage to a plane by reason of alleged negligence in its operation on the part of one who hires it, was the subject of litigation in the case of *Braman-Johnson Flying Service, Inc. vs. Thomson*, N. Y. 167 Misc. 167, 3 N. Y. S. 2d, 602, and certain rules were laid down in that case which have stood unchallenged.

The complaint alleged that the plane was hired for use for a half-hour for acrobatic maneuvers in the immediate vicinity of Roosevelt Field; that it contained enough gas at the time of hiring for approximately 45 minutes flight, and that the flight was not limited to the immediate vicinity of the field for the period of not more than 30 minutes, but was flown beyond these limits, the flight consuming more than 45 minutes and resulting in a forced landing due to fuel exhaustion; also that the defendant failed to check and observe the gasoline gauge on the plane, to ascertain the amount of fuel still available in the reserve tank; and that he was negligent in failing to turn on and use the gasoline in the reserve tank when the fuel in the main tank was consumed.

The Court pointed out that the general rules of bailment apply to aircraft as they do to automobiles for hire, and quoted with approval a leading Massachusetts case in which the Court stated that:

"The rules of law relating to the operation of aircraft, in the absence of statute, in general are rules relating to negligence and nuisance, and are not distinguishable from those which relate to the operation of vehicles, perhaps, more closely to motor vehicles on land."

The well established rules as to actionable negligence were reaffirmed, and were stated to consist generally in a failure of a duty, the omission of something which ought to have been done, or the doing of something which ought not to have been done. The test of actionable negligence is what a reasonably prudent person would have done under the circumstances, before the accident, the degree of care being what is required to be exercised by any person owing a duty to exercise reasonable care, in accordance with the dangers which are incident to his failure to exercise care.

On the subject of whether or not the defendant failed to exercise reasonable care in the operation of the main and reserve fuel tanks, which was held to be the crux of the present case, the Court found that the defendant did not operate the plane in a careful and prudent manner. The Court pointed to the admission by the defendant, that although he had had 10 years' experience of flying in the course of which he received instructions as to the operation of the reserve gasoline tank in case of emergency, he did not think of turning on the reserve.

The Court said that this admission by

the defendant, an experienced pilot of more than 300 hours in the air, shows clearly that it was his negligence that caused the forced landing, because had he turned on the reserve tank which contained three gallons of fuel, he would have been able to return to the flying field without a mishap. Under the circumstances it is plain that the defendant did not exercise due diligence and reasonable care to keep the plane from crashing.

It was held by the Court that the hiring of the plane by the defendant constituted a bailment contract and pointed out that the rule was that where property is in the exclusive possession of a bailee for hire and is damaged in a way which ordinarily does not occur without negligence, the burden of proof is upon the bailee to show that the injury was not occasioned by his negligence. The Court further stated that after the initial check flight, the rented plane was placed in the sole custody of the defendant and that as an experienced pilot he had ample opportunity to check the gas tank and other parts of the plane before taking off for his acrobatics.

The Court concluded that enough proof had been shown by the plaintiff to call upon the defendant to explain the circumstances of the damaging of the plane; whether he exercised proper precautions in the operation thereof, etc., and stated that the defendant's evidence as to his operation of the plane, particularly with reference to the reserve fuel tank, was not of the most satisfactory character. The conclusion was:

"The defendant, in failing to do as he represented to the plaintiff's employees and in taking a longer trip than he agreed to, was guilty of negligence, want of care, and misuse of the bailed article, said deviation without proper care in the use of the reserve fuel tank, being the direct and primary cause of the accident and resulting damage."

Upon the foregoing, the Court held the plaintiff was entitled to judgment upon the merits for the cost of repairs and loss of use of the airplane.

NWA Representatives Pave Way for 1st Survey Flight

Two Northwest Airlines representatives, Frank Der Yuen and Lewis H. Brereton, Jr., have left for the Far East to survey local conditions as a basis for more permanent operations arrangements in China and the Philippines.

When he has gathered preliminary data, Der Yuen will telephone his findings from Shanghai to Brereton in Manila, who, in turn, will relay them, together with his own information, by transpacific telephone to Don J. King, regional vice president of the Orient Region. In this way, the data gathered will be available by the time the first survey flight departs for the Orient, scheduled for December 1.

While in China, Der Yuen will look into such matters as airport facilities, housing, schools, clothing, medical services, transportation and available locations for ticket offices and general offices. He also will go into labor relations and laws, with specific transfer of native personnel from one Far Eastern nation to another; and will check passport and visa regulations and practices. Meanwhile, Brereton will study these and other subjects in the Philippines.

The investigations made in China and the Philippines will be followed by others in Japan and Korea.

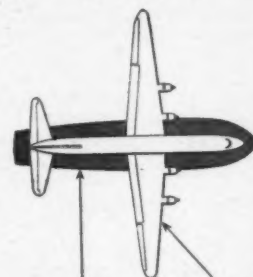
HANGAR FLYING



Course Onward

In October, 1797, the United States Navy proudly launched a graceful, three-masted, 44-gun frigate. In October, 1946, almost a century and a half later, they launched with equal pride a graceful, four-engined airborne transport.

Both ships are called the *Constitution*. The frigate was built in Boston by Joshua Humphreys—the transport in Burbank by Lockheed. Comparison:



	Humphreys'	Lockheed's
Length	175	156
Width	43½	189
	(beam)	(wingspan)
Height	230 (approx.)	50
Capacity	400	180
Top speed	12	300
	(knots)	(miles)

As did the frigate in her time, the flying *Constitution* marks the beginning of a new chapter in naval achievement. A story in the *Boston Centinel* (October 25, 1797) once again becomes currently valid:

"The best judges have pronounced the 'Constitution' to be a perfect model of elegance, strength and durability. And every individual employed in her construction appears to pride himself in having assisted at the production of such a chef-d'oeuvre of naval architecture."

Look to Lockheed for Chefs-d'oeuvre

© Lockheed Aircraft Corporation, Burbank, Calif.

Improvement of Scheduled Airline Service Seen In Commerce Department Report; Recognizes The Spectacular Development of Nonscheduled Lines

ACCORDING to the latest issue of the Domestic Transportation Industry Report released by the United States Department of Commerce, developments in recent months indicate that the current inadequacy of scheduled domestic airline service should be generally relieved early next year.

During the war, the report points out, the level of airline operations was greatly curtailed by the shortage of equipment. At the same time, economic and technological developments and greater interest in air travel were paving the way for a spectacular expansion of air travel with the war's end. Since VJ-Day, however, scheduled airline operations have expanded rapidly, but have failed to keep fully abreast of the enlarged and growing demand for air transportation. On most routes service remains considerably below normal requirements.

"Under the pressure of postwar expansion, the quality of air service has deteriorated markedly," the report states. "Unprecedented levels of operations and traffic have overloaded ground organizations and facilities, with resultant delays, inconveniences and discomfort for the traveling public.

"In part, these difficulties are subject to early correction as new employees acquire experience, expanded facilities come into service, and simplified procedures are put into effect. There will remain, however, many problems of basic importance, the solution of which must precede longer range improvements in standards of service. Among these are the development of all-weather flying procedures, the expansion of the airport system and the improvement of transportation to airports.

"Fares for the present class of trunk line air service are not likely to be reduced significantly below existing levels for at least a year and possibly longer. Thereafter appreciable reductions should be made possible by the use of more economical equipment, by improvements in operating efficiency, and by a wider spread of overhead and other indirect expenses.

"On the hypothesis of a 1946 price level, these several economies should make basic fares in the neighborhood of 3.5 cents per passenger-mile attainable within about two or three years. In addition, it is likely that some airlines will supplement their present service with a second-class, day-coach type of operation, providing less roomy accommodations, and eliminating free meals, reservations and many service extras. Savings possible with this type of operation might permit the further reduction of passenger fares by perhaps $\frac{1}{2}$ or $\frac{3}{4}$ of a cent per passenger-mile."

The present trunkline route pattern,

when fully developed, will provide reasonably complete coverage of almost all major population centers, it is pointed out in the report. Scheduled air service to the great mass of smaller communities must await the development of local and feeder operations.

"This is a new phase of scheduled air transportation and one which will face many specialized problems of an economic and operational nature," the report continues. "With the short distances involved, the relative advantages of air over surface transportation will generally be marginal at best, and the maximum attainable efficiency and economy will be correspondingly important. Since only one of these local routes is now in operation, it is far too early to judge how closely the developing pattern may fit the needs of the public for such service."

Summarizing developments in nonscheduled and charter air operations, the report states that the most spectacular development in this general category of service has come since the end of the war, with the release of thousands of trainee aviation personnel from the armed forces and the disposal of hundreds of surplus transports.

"Services offered by these operators range from occasional charter flights in single passenger planes to nonscheduled operations along specific routes in planes as large as the DC-4.

"Potentially, this general category of operations represents the utmost flexibility in public transportation, being limited neither by terrain nor by fixed route patterns. It is not yet clear to what extent these services may be restricted by economic regulation. If a liberal policy in this matter is followed, considerably greater development of general and special charter services may be anticipated, together with some further development of

A KEY FOR PIASECKI



Seated at the controls of the PV-2, single-place helicopter built by the Piasecki Helicopter Corporation is Frank P. Piasecki, president of the company, who accepts a key to Springfield Township, Delaware County, Pennsylvania, from Ross Osborn, head of the township commissioners. This was part of the groundbreaking ceremonies for the company's new half-million-dollar engineering and manufacturing plant near Philadelphia.

a day-coach class of service along nonscheduled routes."

"With the great saving in time made possible by air travel, and with airline fares now close to, or in some cases actually below, those of Pullman, and airlines are at present in a competitive position to capture the bulk of the first class travel market, the report states. However, before they can compete effectively for the larger passenger market represented by rail coach and bus travel fares will have to be brought to much more competitive levels.

"In addition to competition from surface transportation, the airlines must be prepared to face an important amount of competition from other branches of aviation including private flying, company-owned planes, and nonscheduled and charter services."

LAV Pilot Claims Record

An unofficial coast-to-coast nonstop flight record for *Constellations* has been claimed by Captain Stanley Gordon Granger, of Linea Aeropostal Venezolana, following his arrival at LaGuardia Field six hours, 55 minutes, and 30 seconds after take-off at Burbank, California.

SHANGHAI • MANILA

Direct

AIR FREIGHT SERVICE from New York and Return . . . Approximately Five Days

For information write or phone

J. G. HENWOOD CO., 107 Washington Street, New York City

BOWling Green 9-4775

Cable—Jogahan

AIR TRANSPORTATION Books

AIRLINES—1946—(Merrill Lynch, Pierce, Fenner and Beane, 70 Pine Street, New York; 56 pages). Well-illustrated booklet giving facts and figures of 18 United States scheduled airlines. Good basic data.

AIRPORTS: DESIGN, CONSTRUCTION AND MANAGEMENT—By HORACE K. GLIDDEN, HERVEY FULLER LAW and JOHN E. COWLES. (McGraw-Hill Book Company, 330 West 42 Street, New York; 583 pages plus charts and illustrations; \$7.00). An authoritative book covering all aspects of airport design, construction, and management. The student will find this volume extremely helpful. It is highly recommended.

FREIGHT TRANSPORTATION FOR PROFIT—By HENRY B. COOLEY. (Cornell Maritime Press, 241 West 23 Street, New York; 206 pages; \$5.00). Methods for profitable operation of air and surface transportation companies. Covers competitive aspects, special characteristics of carriers, loading, cost, storing, packaging, labor, etc.

HUMAN FACTORS IN AIR TRANSPORT DESIGN—By ROSS A. MCFARLAND. (McGraw-Hill Book Company, 330 West 42 Street, New York; 670 pages; \$6.00). A painstaking analysis of air transport plane design factors which influence the human

organism in flight. "Aeronautical biology" brought up to date.

INDIA'S POPULATION—FACT AND POLICY—By S. CHANDRASEKHAR. (John Day Company, 2 West 45 Street, New York; 117 pages; \$2.00). Some additional light is thrown on modern India which today is occupying the increasing attention of the rest of the world. The introduction is by Warren S. Thompson.

THE STORY OF LITHUANIA—By THOMAS G. CHASE. (Stratford House, 52 Vanderbilt Avenue, New York; 392 pages; \$3.50). Historical "fortunes and misfortunes of the Lithuanian nation during the past 10 centuries." William Henry Chamberlain writes the foreword.

JAPAN'S PROSPECT—Edited by DOUGLAS G. HARING. (Harvard University Press, Cambridge, Massachusetts; 474 pages; \$4.00). Nine contributors present individual studies covering numerous aspects of the former Axis partner: history, religion, social structure, resources, etc.

THE LOST WAR—By MASUO KATO. (Alfred A. Knopf, 501 Madison Avenue; 264 pages; \$2.75). A well-known Japanese journalist writes about Japan during the war years right through the atomic bombing and the surrender. He is managing editor of Kyodo, successor to Domei.

THROUGH THE STRATOSPHERE—By MAXINE DAVIS. (Macmillan Company, 60 Fifth Avenue, New York; 253 pages; \$2.75). An exceptionally interesting "record of the evolution and use of a vast number of devices . . . for keeping fliers healthy, happy, and in the air."

TRANSPORTATION MANAGEMENT—By HENRY B. COOLEY. (Cornell Maritime Press, 241 West 23 Street; 183 pages; \$5.00). Modern management of air and surface transportation companies. A companion volume to *Freight Transportation for Profit*.

WHERE THE PEOPLE SING—By JOHN LEE ZIMMERMAN. (Alfred A. Knopf, 501 Madison Avenue; 234 pages; \$3.00). All about the "laughing, dignified, brown skinned Maoris" of New Zealand. A charming book which will be enjoyed.

WILD ACRES—By HENRY HAZLITT KOPMAN. (E. P. Dutton and Company, 300 Fourth Avenue, New York; 189 pages; \$3.00). Description of the wild life of the Gulf Country, written in interesting style. The foreword is by John Kieran.

Leslie Sees 4¢ Air Mile In Testimony Before CAB

Testifying before CAB Examiner William J. Madden at a hearing in Atlantic City on Pan American World Airways' application to operate *Clipper* service linking 13 domestic cities, John C. Leslie, vice president of the airline, predicted a "new degree of luxury and speed in air travel . . . at a rate of four cents a mile, 16 percent under prevailing regular fares."

He stated that PAA's competition would encourage other United States airlines to achieve the same low level of rates. Twelve major airlines are opposing PAA's application.



BARR

SERVICE



31 Years

OF CONTINUOUS SERVICE TO
THE AIRPLANE EXPORT TRADE

INTERNATIONAL
SHIPPING AGENTS

Complete Facilities Arranging, Dismantling, Boxing, Forwarding,
All Risk Insurance



BARR SHIPPING COMPANY

HARRY K. BARR, President

25 BROADWAY NEW YORK

Cable Address: BARRSHIPCO





[REG. U. S. PAT. OFF.]

AIR EXPRESS, REA

August air shipments by the Railway Express Agency marked a gain of 49 percent, compared with August, 1945. The total of 252,640 shipments as compared to 169,563 shipments in August, 1945 consisted of many items of consumer goods with ready-to-wear merchandise, automobile parts and radio equipment leading the list. Gross revenue of \$2,411,211 represented an increase of 10.4 percent over the corresponding month of last year.

Topping all previous records in the seven-year history of LaGuardia Field, air express shipments in September were up 75.9 percent compared with September, 1945. Exactly 99,000 shipments were handled during the month for the regularly-scheduled airlines serving the municipal airport, the report indicated.

For the nine-month period, January to September, shipments handled at LaGuardia Field amounted to 747,271, a gain of 39.8 percent over the similar 1945 period.

BEECH

The board of directors of the Beech Aircraft Corporation has postponed action in connection with the declaration of a dividend until such time as the financial results are available for the fiscal year ended September 30, 1946. It is anticipated that the decision about a dividend may be delayed for a period of 60 days or longer.

Walter H. Beech, chairman of the board and president, revealed that sales during the fiscal year of 1946 exceeded original expectations and amounted to \$21,304,598. The present backlog approximates \$30,000,000 of undelivered orders, which considerably exceeds the amount of deliveries for the fiscal year just ended.

CHICAGO & SOUTHERN

Seventy-three percent more revenue passenger-miles were flown by Chicago and Southern Air Lines during the January-September period, involving the carriage of 95 percent more revenue passengers. The airline flew 105,713,000 revenue passenger-miles as compared to 60,984,271 passenger-miles in the same period 1945.

Revenue passengers from January 1 through September 30 of this year totaled 267,000 as against 136,477 during the comparable period last year.

COLONIAL

Colonial Airlines carried 119,725 passengers in the first nine months of 1946, compared with 66,613 for the same period a year ago—an increase of 79.7 percent. A total of 35,264,828 passenger-miles were flown for the first nine months of this year, an increase of 69.5 percent over the same period a year ago. Mail pound-miles totaled 137,826,342, an increase of 48 percent; express pound-miles amounted to 68,385,475, an increase of 27.3 percent over 1945.

DELTA

Delta Air Lines transported 54,031 revenue passengers during September, a new monthly high-mark. The traffic totals for the month exceeded August figures, previously the largest month, by 1,924 passengers. During September 21,815,677 revenue passenger-miles were flown as compared with 20,656,900 revenue passenger-miles during August. DAL also flew 275,000 pounds of air freight.

EASTERN

Eastern Air Lines during the month of September flew 320,086 pounds of express out of LaGuardia Field to set an all-time record out of New York City in the company's history. During the same period 72,586 pounds of mail were flown out of LaGuardia by the company, and 42,000 pounds of air express were moved from Newark Airport.

NATIONAL

National Airlines has reported a net profit after taxes of \$249,360.50 for the first quarter ended September 30. Representing an increase of 259.2 percent over the \$69,431.67 earned during the corresponding period in 1945, the current first quarter earnings are equivalent to 33 cents per share on 749,987 shares outstanding. They exceed by \$22,711.65 the net profit after taxes of \$226,538.85 reported by

National for the entire fiscal year of 1945-1946 ended June 30.

Comparing operations during the past three months with those of the same period in 1945, President C. T. Baker said that revenue passenger-miles flown were up 137.72 percent, from 21,043,726 to 50,024,412; available seat-miles increased 177.95 percent from 23,721,805 to 65,935,209; and that passengers carried jumped 85.53 percent, from 40,577 to 75,281.

NORTHWEST

Total operating revenue of Northwest Airlines for the three month period April 1 through June 30, 1946, was \$4,554,090. This report by Croil Hunter, president and general manager, also revealed a profit of \$373,472 for the quarter before income taxes, but after deduction of special reserves. Net profit, after deduction of all charges, was \$301,616.

For the July-September period, NWA's total operating revenue was \$6,272,988.14, with profit at \$975,878.06 before income taxes. Net profit, after deduction of all charges, was \$536,914.56.

NWA shattered all its previous air express records when its planes, during September, flew 371,521 pounds, a total of 235,942,500 pound-miles. This was 20,602 pounds and 20,951,653 pound-miles greater than the previous record of 350,919 pounds and 214,990,847 pound-miles set in May, 1946. The total this September was more than twice that of September a year ago, when 159,246 pounds of express were carried 106,702,792 pound-miles.

TRANS-CANADA

Traffic statistics for Trans-Canada Air Lines in September released show 32,826 passengers carried, compared with 33,792 in August. Air mail totaled 187,376 pounds compared with 195,065 for the previous month. Air express increased from 74,678 pounds in August to 89,118 in September.

UNITED

An all-time high for air cargo transportation was set up by United Air Lines in September with an increase of more than 211 percent over the same period last year. United flew an estimated 980,000 ton-miles of air freight and express, compared with 314,590 in September, 1945.

Air mail ton-miles flown in September—last month of the eight-cent rate—were estimated at 650,000. During the last week of eight-cent air mail United flew 139,324 mail ton-miles, and during the first week of nickel air mail the ton-mile figure rose to 147,996.

AIR CARGO INSURANCE

MAIL

EXPRESS

FREIGHT

Carriers Liability—Shippers All Risk Anywhere in the World

NEW YORK 17
60 E. 42nd STREET
Murray Hill 2-7424

PARKER & CO.

Specializing in aviation insurance for over 20 years

PHILADELPHIA 3
1616 WALNUT STREET
KINgslEy 1200

AIR TRANSPORTATION *Congratulates*

★ EXECUTIVE ★

T. D. NEELANDS, JR., elected a director of Robinson Aviation, Inc. He is also a director of the Beech Aircraft Corporation, and president of Technical Managers, Inc.

J. STANTON ROBBINS and **RICHARD E. S. DEICHLER**, now serving in the respective American Overseas Airlines posts of vice president and European general manager, and vice president-traffic. Robbins' most recent job was vice president-traffic and Deichler's vice president-sales.

HAROLD B. SEIFERT, general manager of Pioneer Air Lines, elevated to the position of vice president in charge of operations. He is a former pilot for the Air Transport Command.

R. B. KENTY, appointed vice president-domestic sales of Air Associates, Inc. He joined the corporation in 1934 and has served as manager of the Dallas branch since 1939.

BRYCE BLYNN, appointed assistant to American Airlines' vice president-operation. A former AAF colonel, he joined the company just one year ago.

EVERETT A. EISENBERG and **GORDON B. SIMPKINS**, promoted to the respective positions of assistant to the president and general traffic manager of Empire Airlines. Eisenberg, a graduate of Harvard Law School and a member of the New York Bar, served as an ATC pilot during the war; Simpkins formerly served as traffic manager in Buffalo for American Airlines.

C. W. BIRELY, JR. and **GEORGE OLSEN**, named to the Pan American World Airways posts of assistant to the assistant vice president-services and supplies, and manager of the New York office. Birely is former New York office manager, and Olsen served as assistant to Vice President Samuel F. Pryor, Jr.

★ ADVERTISING ★ PUBLIC RELATIONS

GEORGE H. LYON, named public relations manager of Pan American World Airways' Atlantic Division. He is a former deputy to Elmer Davis, OWI director.

E. A. RAVEN, appointed assistant director of advertising for United Air Lines. **SAMUEL HAIR** has joined the department as media advertising manager.

JOHN L. LOBINGIER, JR., an AAF captain during the war, serving as combat intelligence and public relations officer with the TCC, named advertising manager for Wiggins Airways. For the past year he has been associated with an advertising agency.

SAMUEL C. PACE, veteran newspaperman, now associated with American Airlines as Southern regional director of public relations. An Army major, his last assignment was as director of education of German prisoners of war in the Eighth Service Command.

KATHRYN IDSO, serving as manager of PAA's Honolulu news bureau. She has been with the airline since 1943, and managed the Los Angeles news bureau since early last year.

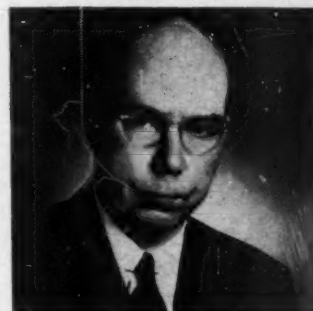
★ TRAFFIC ★

JAMES J. FAUTEUX, promoted to Northwest Airlines' new post of Orient traffic manager; and **GORDON MACLAREN**, who replaces Fauteux as regional traffic manager in New York. Fauteux is a veteran of more than 17 years in the transportation business; MacLaren has been serving as district traffic manager in New York.

JAMES J. DAVIN, JR. and **RUSSELL I. McLAUGHLIN**, new district traffic and sales managers for UAL in the respective cities of Pittsburgh and Tacoma.



T. D. Neelands, Jr.



George H. Lyon



Samuel C. Pace



James J. Fauteux



Ledyard Gardner



F. H. Hankins, Jr.



PAA EXECUTIVES HONORED—Secretary of War Robert Patterson is shown in both these pictures, presenting the Medal of Merit to Juan T. Tripp, president of Pan American World Airways (right), and Samuel F. Pryor, vice president of the airline. Tripp and Pryor were awarded the coveted decorations for their wartime service to the United States. The PAA president recently was awarded the Brazilian Order of the Southern Cross for his service in fostering closer relations between Brazil and this country.

WARREN E. CERRONE, **CHARLES J. LOWEN, JR.**, and **CHARLES H. JONES, JR.**, all named district general managers in Capital Airlines' Eastern Region. Cerrone is at Harrisburg, Lowen at Pittsburgh, and Jones at Baltimore.

WAYNE A. SPRAGUE, former regional reservation agent for Mid-Continent Airlines, appointed city traffic manager at Tulsa.

DONN H. RUDD, new sales and traffic representative for Eastern Air Lines in the Lexington-Frankfort, Kentucky, area.

JOSEPH R. LATHAM, **DAVID S. TOBEY**, and **WILLIAM L. YOLD**, all named by Capital Airlines as New York traffic representatives.

★ SALES ★

LEDYARD GARDNER, appointed sales promotion manager for KLM's North American Division. Prior to joining KLM, he was executive assistant to the director of traffic for TACA, and was associated with United Air Lines for several years.

ALFREDO de los RIOS, founder and executive vice president of the Inter-American Escadrille, appointed manager of Latin American sales for the Luscombe Airplane Corporation. Before joining Luscombe, he headed personal plane sales in the Export Division of Fairchild.

H. F. MILLEY, **JUAN HOMS, JR.**, and **H. W. PETERSON**, appointed United States regional sales managers of PAA. Milley will head the Eastern Region, Homs the Midwestern, and Peterson the Western.

DUDLEY W. WILLIAMS and **WILLIAM J. MURPHY**, named by Capital Airlines to the respective positions of inter-line and agency department manager in New York, and district sales manager in the same city.

★ OPERATIONS ★

F. H. HANKINS, JR., new operations manager of PAA's Atlantic Division.

Aaxico on the Go

(Continued from Page 41)

tician and accountant. Before accepting the post of treasurer for Aaxico, Bill Korth went into the furniture manufacturing business as administrative head in charge of finance.

Thomas J. Carroll, 26, is vice president in charge of the New York division. Here again is a Notre Dame grad, who received his first aviation business experience at the Detroit School of Aviation. He eventually wound up with the Coast Guard where he served in the Intelligence Division. Tom was responsible for the lining up of the airline's first cargoes before switching to the passenger business.

Johnston Seymour Kail, 34-year old flyer who recently was elected to the vice presidency in charge of traffic and operations, has a storybook background.

He holds a master of science degree, and has been with the airline since 1933.

HERBERT L. THOMAS, JR., **JAMES A. MAXWELL, JR.**, and **SANTOS CEYANES**, named by PAA to new posts in the Latin American Division: Thomas assistant to the operations manager; Maxwell and Ceyanes, assistant operations managers.

★ MISCELLANEOUS ★

ROY CALLAHAN, appointed by the Air Transport Association as general manager of the newly organized Airlines Terminal Corporation and **JAMES J. WADSWORTH**, named ATA's director of governmental affairs. Callahan's most recent positions were as general manager of the New York City Airport Authority and Assistant Commissioner of New York's Marine and Aviation Department. Prior to joining the ATA, Wadsworth served as director of the Public Interest Division, WAA.

H. M. HORNER, president of the United Aircraft Corporation, elected chairman of the Eastern Region Aircraft Manufacturers Council, Aircraft Industries Association; and **J. CARLTON WARD, JR.**, president of the Fairchild Engine and Airplane Corporation, designated vice chairman.

HERBERT H. MUNSEY, Bell Aircraft Corporation patent counsel, named chairman of the Patent Advisory Committee, Manufacturers Aircraft Association.

W. R. ENYART, chairman of the National Aeronautic Association board and president of Simmonds Aerocessories, Inc., elected vice president of Federation Aeronautique Internationale.

GORDON HAMILTON, assistant manager of LaGuardia Airport in New York, appointed acting manager of Floyd Bennett Field.

LOUIS W. GOODKIND, who succeeds Robert W. Oliver as assistant director (domestic) of the Economic Bureau of the Civil Aeronautics Board.

He is a graduate of the University of Washington; Ayama Gakin and Waseda University, Tokyo; and the Foreign School of Language, Peking. The six-foot-four chap with the physique of a football tackle is an all-round sportsman, a former soloist with a dance band, and a one-time cartoonist for Walt Disney at a hefty salary. But flying was too strong in him, having been a Navy pilot. This time it was flying for Pan American as senior pilot — a job at which he was frozen for the duration of the war. In this capacity, Captain Kail flew bombers to all war theaters before resigning to join Aaxico as an executive.

Holding down the job of secretary in charge of maintenance is Glenn H. McNew, 42, who originally came from Pan American. In Florida he supervised maintenance for five other airlines in addition to Aaxico, thus enabling the

company to service planes 24 hours a day. Now service is entirely for Aaxico. Aaxico's stockpile of a half-million dollars' worth of spare parts and engines is credited to McNew.

Recently the airline, among others, was hit by a show-cause order handed down by the CAB. Whatever the result of the hearings, Aaxico is a name that has made its imprint in the air transport field.

Expreso Aereo Stock Bought by Transair

Information made public by Donald W. Stewart, director of Expreso Aero Inter-Americano, S. A., revealed that interests associated with Transair, Inc., New York charter passenger line, have made a cash purchase of 175,000 shares of Expreso common stock. Four DC-3s and replacement parts have been turned over to the Cuban airline by Transair in exchange for \$350,000 five-year four percent convertible notes.

Heading the Transair group were W. Deering Howe, vice president, and Hugh McL. Fenwick, vice president. Transair will take over Expreso's management following the resignation of incumbent officials headed by Jose de la Torriente, president. According to Stewart, Transair has indicated its intention of acquiring the 52 percent interest of Pan American Airways in Compania Cubana de Aviacion, S. A., competing Cuban airline, before expiration of Expreso's option on January 25, 1947.

The planes which have been turned over to Expreso will be utilized on the airline's Havana-Miami run and in the extension of its routes to Caribbean points and Mexico City.

Air Cargo Personalities

(Continued from page 36)

was immediate in-transit customs clearance of all shipments.

Under Springer's direction, Capital's Skyfreight department has made rapid strides. The airline has applied for coast-to-coast routes to carry freight and other cargo on a scheduled basis. The plans for the future are elaborate and will require an experienced air cargo man at the helm. Guy Springer is that man at Capital Airlines.

That Cargoliner 230

(Continued from Page 38)

hoist boom hinged to the upper aft corner of the main cargo door, facilitates loading of heavy articles. This comes in extra-handy at fields with only a minimum of ground equipment. It can be moved to five different points in the plane, and can lift 2,500 pounds at 30 feet per minute. In addition, the winch can be attached to tie-down points within the plane, and be used to move heavy cargo to and from stowage spots.

Two 32-candlepower flexible floodlights on the upper inside section of each side of the main cargo door aid night cargo loading or unloading, and when the door is open the lights play over the entire loading area outside the plane.

UNITED STATES NONSCHEDULED-CONTRACT AIR CARRIERS AND INTRASTATE AIRLINES

[illegible]

Company Name	Address	City	State	Country
Atlantic Air Charter Flying Service	1235 N. E. 96th St.	Miami	Fla.	
Atlantic Air Lines	1600 Walnut St.	Philadelphia	Pa.	
Atlantic Eastern Airlines	1000 N. E. 96th St.	Miami	Fla.	
Atlantic Gulf & Midland Corp.	Little Ferry N. J.	New York	N. J.	
Atlantic-Western Airlines, Inc.	Municipal Airport, Danville, Va.	Danville	Va.	
Aviation Services, Inc.	1010 Walnut St.	Orensboro, Ky.	Ky.	
Aviation Schools & Service	1010 Walnut St.	Orensboro, Ky.	Ky.	
Ayer, Nolle	1010 Walnut St.	Orensboro, Ky.	Ky.	
Charles H. Babb Co.	Hayward Municipal Airport, Glendale, Calif.	Glendale	Calif.	
Euca Airways	Chillicothe, Ohio	Chillicothe	Ohio	
Bailey Flying Service	West Plains, Missouri	West Plains	Missouri	
Bair, Donald W.	Hillbore Airport, Hillbore, Oregon	Hillbore	Oregon	
Baker, C. P.	Tulip Rd., Lewellyn Pt., W. Orange, N. J.	W. Orange	N. J.	
Ball-Balston Flying Service	Fort Stockton, Texas	Fort Stockton	Texas	
Barnegat Aviation, Inc.	P. O. Box 474, Roswell, N. M.	Roswell	N. M.	
Baumgardner, Ray L.	Municipal Airport, Beatrice, Nebraska	Beatrice	Nebraska	
Bay Meadows Aviation Co.	Municipal Airport, Independence, Iowa	Independence	Iowa	
B&B Flying Service	149 Essex St., Muldew, Mass.	Muldew	Mass.	
Beatrice Flying Service	Municipal Airport, Hastings, Neb.	Hastings	Neb.	
Beatty Air Sales	Belding Airport, Belding, Mich.	Belding	Mich.	
Beaver Air Express, Inc.	Beloit, Kansas	Beloit	Kansas	
Beche Air Service	Box 156, Bemidji, Minnesota	Bemidji	Minnesota	
Belding Aircraft & Sales	Red Bluff, Calif.	Red Bluff	Calif.	
Bellair Air Service	Box 297, Independence, Kansas	Independence	Kansas	
Bemidji Airlines, Inc.	Great Barrington Airport, Mass.	Great Barrington	Mass.	
Benna & Ward Flying Service	Fort Morgan, Colorado	Fort Morgan	Colorado	
Berents Flying Service	Fort Morgan, Kansas	Fort Morgan	Kansas	
Berkshire Aviation Enterprises, Inc.	P. O. Box 904, Municipal Airport, Las Vegas, N. M.	Las Vegas	N. M.	
Berry Hill Aircraft Sales	Yankee Stadium, New York	New York	N. Y.	
Betzer Wilford	Box N. E. 96th St., Miami	Miami	Fla.	
Bibbs Flying Service	Box N. E. 96th St., Miami	Miami	Fla.	
Big Bear City Airport	Box 689, Gretna, Wyo.	Gretna	Wyo.	
Big Horn Flying Service	Box 2, Savannah, Ga.	Savannah	Ga.	
Bilhorn Flying Service	Yonkers, Ohio	Yonkers	Ohio	
Bird Airport	Municipal Airport, Long Beach, Calif.	Long Beach	Calif.	
Bird Airways	Bismark, North Dakota	Bismark	North Dakota	
Bismark Flying Service	305 West End Avenue, N. Y. C.	New York	N. Y.	
Blaine Airways	Blair, Nebraska	Blair	Nebraska	
Blair Flying Service	1109 W. Florence Ave., Los Angeles, Cal.	Los Angeles	Cal.	
Blats Airlines, Inc.	Municipal Airport, Chicago	Chicago	Ill.	
Bluebird Airlines	Russellville, Ky.	Russellville	Ky.	
Bluegram Airlines	Laverne, Minn.	Laverne	Minn.	
Blue Mound Air Service	Scott's Bluff, Nebraska	Scott's Bluff	Nebraska	
Bluff & Aviation Sales Co.	Montevideo, Minn.	Montevideo	Minn.	
Bob's Flying Service	Rio Grande Valley, International Airport, Brownsville, Texas	Brownsville	Texas	
Border Aircraft Service	Box 767, Borger, Texas	Borger	Texas	
Borger Air Service	Boulder, Colo.	Boulder	Colo.	
Boulder Flying Service	Custer, S. D.	Custer	S. D.	
Bourassi Flying Service	Old Muncie Airp., Santa Fe, N. M.	Santa Fe	N. M.	
Boyd Aero Service	Easton Airport, Stockerton Rd., Easton, Pa.	Easton	Pa.	
Braden's Flying Service	Municipal Airport, Clarion, Ohio	Clarion	Ohio	
Bram-Air Service, Inc.	119 Administration Bldg., Holman Field, St. Paul, Minn.	St. Paul	Minn.	
Brandt Aero Service	Florida Air Transport, 117 N. E. 103d St., Miami, Fla.	Miami	Fla.	
Braunan, L. L.	Lambert Field, St. Louis, Mo.	St. Louis	Mo.	
Brayton Flying Service, Inc.	Gratz, Pa.	Gratz	Pa.	
Bresler's Air Service	Orange, Texas	Orange	Texas	
Brownair, Inc.	709 First Nat'l Bldg., Birmingham, Ala.	Birmingham	Ala.	
Brown Service Funeral Homes Co.	Jefferson Airfield, Jefferson City, Mo.	Jefferson City	Mo.	
Brummet Aviation Co.	95 State St., Springfield, Mass.	Springfield	Mass.	
Bryant, Vance W.	Hot Springs, Arkansas	Hot Springs	Arkansas	
Buckhamon Flying Service	Lewis Airport, Buckhamon, West Va.	Buckhamon	West Va.	
Burton Air Service	Lincoln, Nebraska	Lincoln	Nebraska	
Buher, Gordon	Albany, Nebraska	Albany	Nebraska	
Butcher & Nungler Air Service	Alliance, Nebraska	Alliance	Nebraska	
California Eastern Airways	406 Montgomery St., San Francisco	San Francisco	Calif.	
Call, Raylow H. Flying Service	Box 301, Afton, Wyoming	Afton	Wyoming	
Cambridge Taxi Co.	60 State St., Boston 9, Mass.	Boston	Mass.	
Campbell Flying Service, Inc.	Rolla, Missouri	Rolla	Missouri	
Cape Girardeau Flying Service	Harris Field, Cape Girardeau, Missouri	Cape Girardeau	Missouri	
Capistrano Airways, Inc.	Box 205, San Juan Capistrano, Calif.	San Juan Capistrano	Calif.	
Carlson Flying Service	Holman Field, 221 Administration Bldg., St. Paul 1, Minn.	St. Paul	Minn.	
Cardinal Aviation	526 Cooper St., San Antonio 3, Texas	San Antonio	Texas	
Caribbean Air Transport, Inc.	Newa Tower Bldg., Miami	Miami	Fla.	
Caribbean American Lines, Inc.	229 Shoreland Bldg., Miami 32, Florida	Miami	Fla.	
Caribe Airways Line	1 Fernandez Campos, San Juan, P. R.	San Juan	P. R.	
Carson Flying Service	Box 521, Carson City, Nevada	Carson City	Nevada	

PAGE 54—AIR TRANSPORTATION—*Air Commerce*[illegible]

Continued on next page

UNITED STATES NONSCHEDULED-CONTRACT AIR CARRIERS AND INTRASTATE AIRLINES—Continued

COMPANY	ADDRESS	OFFICER	AREA OF OPERATIONS	AIRPLANES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
				(in operation)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
				DC-3	DC-4	Commando	Twin Cessna	247-D	Noorduyn	Hudson	Condor	AT-17	Ford	Europe	Taylorcraft	Aeronca	Cub	Lodestar	Grumman	Waco	PT-17	Electra	C-47	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando	Countess	DC-3	DC-4	Commando

[illegible]

Continued on next page

[illegible]

[illegible]

Continued on next page

PAGE 60—AIR TRANSPORTATION—*Air Commerce*

COMPANY	ADDRESS	OFFICER	AREA OF OPERATIONS	AIRPLANES																			Cargo and Passengers														
				(in operation)																																	
				D-3	D-4	Conestoga	Commando	Rwin Cosma	D188	347-D	Noorduyn	Caudron	T-50	BT-13	Ford	Brucoupe	AT-6	Taylorcraft	Aerocraft	Cub	Lodestar	Urumman	Waco	PT-17	Elctra	D-3	D-4	Packet	U188	Noorduyn	Cub	Seabee	AT-11	UC-48	Cruiser	Cargo only	Passengers only
San Benito Flying Service.....	Box 1774, San Benito, Texas																																				
San Diego Sky Freight.....	Lindbergh Field, San Diego, Calif.																																				
San Francisco Sky Freight.....	Wendover, N. Dak.																																				
San Francisco Sky Freight.....	P. O. Box 151, San Francisco, Calif.																																				
San Francisco Sky Freight.....	R.F.D. 138, Santa Fe, N. Mex.																																				
San Francisco Sky Freight.....	Box 209, Santa Fe, N. Mex.																																				
San Francisco Sky Freight.....	80 E. Jackson Blvd., Chicago, Ill.																																				
San Francisco Sky Freight.....	Evellia Orchard, Bolingbrook, N. J., R.R. #1																																				
San Francisco Sky Freight.....	Warren County, N. J.																																				
San Francisco Sky Freight.....	Glen Haven, Iredale, N. Y.																																				
San Francisco Sky Freight.....	Victory Airport, Rt. #5, Camden Station, Minneapolis, Minn.																																				
San Francisco Sky Freight.....	Box 192, Sidney, Nebraska																																				
San Francisco Sky Freight.....	Greene County Airport, Waynesburg, Pa.																																				
San Francisco Sky Freight.....	Municipal Airport, Seneca, Kansas																																				
San Francisco Sky Freight.....	Scott Field, Beckley, W. Va.																																				
San Francisco Sky Freight.....	Cookston, Minn.																																				
San Francisco Sky Freight.....	Iowa City, Iowa																																				
San Francisco Sky Freight.....	Box 440, Needho, Missouri																																				
San Francisco Sky Freight.....	P. O. Box 61, Sheridan, Wyoming																																				
San Francisco Sky Freight.....	Fremont, Nebraska																																				
San Francisco Sky Freight.....	R.F.D. #4, Box 66, Sequin Airport, Sequin, Texas																																				
San Francisco Sky Freight.....	Silver Springs, N. Y.																																				
San Francisco Sky Freight.....	904 S. E. Washington, Brownsville, Texas																																				
San Francisco Sky Freight.....	Devils Lake, N. Dak.																																				
San Francisco Sky Freight.....	Box 1409, Sioux City, Iowa																																				
San Francisco Sky Freight.....	Sussex, S. D.																																				
San Francisco Sky Freight.....	1529 Broadway, Fargo, N. Dakota																																				
San Francisco Sky Freight.....	801 N. 2nd St., Albuquerque, N. M.																																				
San Francisco Sky Freight.....	1128 South St., Los Angeles																																				
San Francisco Sky Freight.....	Newark Airport, Newark																																				
San Francisco Sky Freight.....	Box 421, Skyharbor Airpt., Anaheim, Tex.																																				
San Francisco Sky Freight.....	Phila. Northeast Airport, Philadelphia																																				
San Francisco Sky Freight.....	Phila. Northeast Airport, Philadelphia																																				
San Francisco Sky Freight.....	Herbert Smart Airport, Macon, Ga.																																				
San Francisco Sky Freight.....	Municipal Airport, Niagara Falls, N. Y.																																				
San Francisco Sky Freight.....	1801 Ponce De Leon Blvd., Coral Gables, Fla.																																				
San Francisco Sky Freight.....	Box 11, Durant, Okla.																																				
San Francisco Sky Freight.....	274 Madison Ave., N. Y. C.																																				
San Francisco Sky Freight.....	Everett, Wash.																																				
San Francisco Sky Freight.....	P. O. Box 1121, San Antonio 6, Tex.																																				
San Francisco Sky Freight.....	M. O. Box 1121, San Antonio 6, Tex.																																				
San Francisco Sky Freight.....	13 S. 6th St., Columbia, Missouri																																				
San Francisco Sky Freight.....	P. O. Box 429, Spencer, Iowa																																				

AIRPLANE	AREA OF OPERATIONS	OFFICER	ADDRESS	COMPANY
Vernon Flying Service Verona Flying Service Veterans Air Express Co. Vermont Air Transport Co. Viking Air Transport Virginia Airways Vulpe's Flying Service	U. S. and Europe United States	Saupe Gravelly, Pres. R. R. Hart, Pres.	Vernon Air Park, Vernon, Texas Wadena, Minnesota 11 Commerce St., Newark 53 W. Jackson Blvd., Chicago 1606 Airway, Grand Central Air Term. Charlottesville, Va. Box 28, Claremont, N. H.	
Waer, Reverend Al. Lompac Flying Service Waldo Air Service Wallace Air Service, Inc. Warde Flying Service Warren Bros. Flying Service Washington Flying Service Washington Airways Waterman Airlines, Inc. Watson, J. B. Wayne Air Service Webster City Flying Service Weisman, G. P. West Coast Airlines West Virginia Air Express Western Air Charters Western Continental Airlines Western Flying Service Western Massachusetts Airlines West Coast Seaplane Service West Virginia Air Service, Inc. Whaley and Merrick Aviation White Bear Flying Service White River Flying Service Wiggins Airways, Inc., E. W. Willott's Flying Service Williams, A. C. Williamson Air Service Williamson School of Aviation Willis Air Service (See Commander Line) Willmar Air Service Wilson & Cabin Airport Winley's Flying Service Winfield Air Service Winged America Wings of Mercy, Inc. Wisconsin Flying Service Wisconsin Central Airlines, Inc. Wisconsin-Minnesota-Dakota Airways Wissel, Leonard A. Wofford, Jesse B. Wood, Chas. A. Worland Flying Service Wright Flying Service The Wyoming Air Service Wyoming Flying Service, Inc. Yaakum Flying Service Young, H. C. Yonkers Air Transport	Alabama, Puerto Rico	Carol Waterman, V. P.	Republican City, Neb. P. O. Box 290, Spokane, Washington R.F.D. #1, Dexter, Mo. Box 205, Roxboro, N. C. Washington, Iowa Ephrata, Wash. Bates Field, Mobile, Ala. Las Vegas, N. Mex. Wayne, Nebraska Webster City, Iowa Kingsville, Texas Route 12, Kirkwood, Missouri Chenning County Airport, Elmira, N. Y. P. O. Box 683, Wellington, Tex. P. O. Box 471, Hutchinson, Kansas Fletcher Field Airport, Wendover, Wash. Seattle, Wash. Municipal Airport, Beckley, W. Va. 5901 West Imperial, Los Angeles Grand Central Air Terminal, Glendale, Cal. Winner, South Dakota P. O. Box 924, Pittsfield, Mass. Clarkburg, W. Va. Route 6, Gainesville, Texas South Street, St. Paul, Minn. Municipal Airport, Brownwood, Texas Meeker Airport, Meeker, Colo. Norwood, Mass. Brookfield Airport, Brookfield, Mass. 44 Fort Brown, Brownsville, Texas P. O. Box 430, Adams Field, Little Rock, Ark. Denver, Colo. Sage Field, Tragoon, Texas Line) Municipal Airport, Willmar, Minnesota Route 4, Ennis, Texas Smith Field, Cape May Courthouse, N. J. P. O. Box 610, Winfield, Kansas 921 Land Title Bldg., Phila. Northeast Airport, Philadelphia Belleville, Ill. H. C. Anker, Winona, Minnesota c/o Roberts & McInnis Transportation Bldg., Washington, D. C. 30 Mead-Witter Bldg., Win. Rapids, Wis. Martin, South Dakota 145 Avenue G, Hereford, Texas P. O. Box 305, Clay Center, Kansas Box 1092, Worland, Wyo. Williston, N. Dak. Box 260, Lander, Wyoming Casper, Wyoming Chadron, Nebraska Nichols Airport, Marshall, Missouri Box 288, Lewistown, Idaho	F. P. Dollenberg, Pres. E. G. Barnett, Pres.

headlines

UNDER THE DEADLINE

Reports from London state that more than 6,000 guests, representing over 40 countries, attended the flying display and exhibition sponsored by the British Aircraft Constructors at Radlett Aerodrome, 20 miles north of London. . . A special committee to analyze actual airline operating costs as a basis for air transport rates throughout North and South America has been set up by the International Air Transport Association. . . Heading the Western Conference (IATA) for the coming year is F. von Balluseck, of KLM Royal Dutch Airlines.

The aviation industry is waiting for definite word on the reported merger of Lockheed Aircraft and Consolidated Vultee. Lockheed was the second largest producer of wartime aircraft and Consolidated the third largest. . . Figures indicate that United States exports of aviation equipment will go above the \$100,000,000 mark this year. France was the top buyer in the January-June period, with Canada, the United Kingdom, and Sweden, ranging second, third and fourth. . . The report issued by the Postwar Planning Committee of the United States Maritime Commission states that although the plane will take a big slice of surface-borne passenger and mail revenues, the carriage of seaborne freight will not be seriously affected.

Iceland's Parliament has ratified an agreement with the United States for American use of Keflavik Airport. Agreement calls for all United States military personnel to leave Iceland within six months, although civilian personnel may remain. Both civilian and military aircraft of the United States may use the facilities at Keflavik. . . The Parnamirim air base, largest in Brazil, has been returned by the United States to Brazil. . . The Federal Reserve Bank of New York, working in co-operation with the New York City Clearing House Association, is giving speedier service on check collections through the use of air freight. Some 700 pounds of checks are flown daily to 13 major cities throughout the country.

Pan American World Airways is push-

ing its plan to build 30 modern hotels costing \$50,000,000 along its Latin American air routes. . . Helicopter landing space is included in the plan of William Zeckendorf, executive vice president of Webb and Knapp, to rebuild the East River (New York) waterfront area between 41st and 49th Streets. . . Interesting gadget is the In Flight Radarange, a development of the Raytheon Manufacturing Company, Waltham, Massachusetts, which is designed to defrost and heat a precooked eight-ounce meal (four ounces meat, two ounces potato, two ounces vegetable) in approximately one minute.

Fireproofing will be required in passenger, crew, cargo and baggage compartments and power plant installations in all passenger aircraft, according to new fire safety regulations by the Civil Aeronautics Board. Existing aircraft must be modified in accordance with the new requirements, and changes must be incorporated in all transport planes now being manufactured. . . The United States and Great Britain have reaffirmed adherence to the Bermuda air pact and agree to follow its basic principles in negotiating any new interim bilateral agreements with other countries. . . L. Semens, Soviet delegate to the UNRRA Council of the Far East, previously hit plans for the new Chinese airline headed by Major General Claire L. Chennault, stating that China's two existing airlines can be utilized for hauling emergency relief shipments, and that if a third one is needed an out-and-out Chinese relief airline "with Chinese pilots to fly over Chinese territory" can be organized.

All American Aviation has demonstrated the first airplane equipped for combination air pick-up passenger service. Passengers on the first flight at the National Airport, Washington, D.C., were James M. Landis, Representative Jennings Randolph, and Robert M. Love. . . The United States and Argentine delegations have suspended, "for the time being," negotiations for an air transport agreement. Suspension does not affect PAA and Panagra. . . International air express traffic in far greater volume than last year is reported by REA.

SHIPPER'S WORLD MAP...
Traditional East-West trade
routes of yesterday are replaced by
the global highways of the Air Age.

AIR CARGO Insurance



BASE MAP COPYRIGHT BY

RAND McNALLY & COMPANY

Huge flying freight cars streaking through the skies to the farthest corners of the earth have changed all former concepts of time, distance, and commerce.

Our policies, protecting ship-

ments to all parts of the world, have kept pace with each new development in air transportation. Let us assist you through your agent or broker in obtaining proper air cargo coverage.

111 John Street

Wm. H. McGee & Co., Inc.

New York City

Underwriters of Everything in Transit

CHICAGO

LOS ANGELES

ATLANTA

BALTIMORE

TORONTO

SAN FRANCISCO